# Medical Engagement:  Beyond the MEDCAP

A Monograph
by
MAJ Edward Lee Bryan, Jr.
US Army



MENS EST CLAVIS VICTORIAE

**School of Advanced Military Studies**
**United States Army Command and General Staff College**
**Fort Leavenworth, Kansas**

**AY 2008**

| | | |
|---|---|---|
| **REPORT DOCUMENTATION PAGE** | | *Form Approved*<br>*OMB No. 0704-0188* |

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.**

| 1. REPORT DATE (DD-MM-YYYY)<br>16-04-2008 | 2. REPORT TYPE<br>SAMS Monograph | 3. DATES COVERED (From - To)<br>July 2007 – May 2008 |
|---|---|---|
| 4. TITLE AND SUBTITLE<br>Medical Engagement: Beyond the MEDCAP | | 5a. CONTRACT NUMBER |
| | | 5b. GRANT NUMBER |
| | | 5c. PROGRAM ELEMENT NUMBER |
| 6. AUTHOR(S<br>Major Edward Lee Bryan Jr. (U.S. Army) | | 5d. PROJECT NUMBER |
| | | 5e. TASK NUMBER |
| | | 5f. WORK UNIT NUMBER |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)<br>School of Advanced Military Studies (SAMS)<br>250 Gibbon Avenue<br>Fort Leavenworth, KS 66027-2134 | | 8. PERFORMING ORG REPORT NUMBER<br>SAMS |
| 9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)<br>Command and General Staff College (CGSC)<br>1 Reynolds Avenue<br>Fort Leavenworth, KS 66027 | | 10. SPONSOR/MONITOR'S ACRONYM(S)<br>CGSC |
| | | 11. SPONSOR/MONITOR'S REPORT NUMBER(S) |

| 12. DISTRIBUTION / AVAILABILITY STATEMENT |
|---|
| Approved for Public Release; Distribution is Unlimited |

| 13. SUPPLEMENTARY NOTES |
|---|
| |

**14. ABSTRACT**

This paper answers the question: Is the way the US military provides Health Services Support via medical engagements with foreign populations the proper and most efficient way US military medical resources can be employed in the current environment? To further frame the understanding, the following question is also answered: How should the US military employ medical resources in order to further US military, and foreign, objectives?

The author contends that US military medical resources can be better leveraged to support US foreign policy objectives by looking beyond the current manner of medical engagement with foreign governments and population groups under auspices of security cooperation and Humanitarian and Civic Assistance (HCA) activities. Specifically, medical engagements should be focused on development of fragile states' capacity for provision of medical services to local populations and, concurrently, detection and response to infectious disease outbreaks. US military medical engagements should be designed to improve the health security of populations in fragile states for the long-term.

| 15. SUBJECT TERMS |
|---|
| Medical Engagement, Medical Civic Action Program, MEDCAP, Fragile State, Medically Vulnerable, Human Security, Health Services Support, Medical Strategy, Humanitarian and Civic Assistance, HCA, Medical Capacity |

| 16. SECURITY CLASSIFICATION OF:<br>N/A | | | 17. LIMITATION OF ABSTRACT | 18. NUMBER OF PAGES | 19a. NAME OF RESPONSIBLE PERSON<br>Stefan J. Banach<br>COL, U.S. Army |
|---|---|---|---|---|---|
| a. REPORT<br>(U) | b. ABSTRACT<br>(U) | c. THIS PAGE<br>(U) | (U) | 87 | 19b. PHONE NUMBER (include area code)<br>913-758-3302 |

**Standard Form 298 (Rev. 8-98)**
**Prescribed by ANSI Std. Z39.18**

# SCHOOL OF ADVANCED MILITARY STUDIES

## MONOGRAPH APPROVAL

Major Edward L. Bryan, Jr.

Title of Monograph: Medical Engagement:  Beyond the MEDCAP

This monograph was defended by the degree candidate on 16 April 2008 and approved by the monograph director and reader named below.


Approved by:


_____       Monograph Director
Robert Feldman


_____       Monograph Reader
Michael Swanson, COL, AV


_____       Monograph Reader
Jacob W. Kipp, Ph.D.


_____       Director,
Stefan J. Banach, COL, IN       School of Advanced
Military Studies



_____       Director,
Robert F. Baumann, Ph.D.       Graduate Degree
Programs

# Abstract

MEDICAL ENGAGEMENT:  BEYOND THE MEDCAP by MAJ Edward L Bryan, Jr., US Army, 46 pages.

The term Medical Civic Action Program (MEDCAP) is often utilized as the sum total of the understanding of medical engagements conducted by the medical formations of the US military in the current environment.  When utilized, the term MEDCAP quite often brings to mind a team of US military healthcare providers arriving in a remote village, establishing a clinic, and providing acute medical treatment for any and all local villagers within the surrounding area.  Although realistic, the limitations inherent in this less than complete understanding of military medical engagements belie the true nature of military medical engagements and the benefits that may be realized by medical operations in support of tactical, operational, and even strategic objectives separate from provision of Health Services Support to eligible beneficiaries.

This paper answers the question:  Is the way the US military provides Health Services Support via medical engagements with foreign populations the proper and most efficient way US military medical resources can be employed in the current environment?  To further frame the understanding, the following question is also answered:  How should the US military employ medical resources in order to further US military, and foreign, objectives?

The author contends that US military medical resources can be better leveraged to support US foreign policy objectives by looking beyond the current manner of medical engagement with foreign governments and population groups under auspices of security cooperation and Humanitarian and Civic Assistance (HCA) activities.  Specifically, medical engagements should be focused on development of fragile states' capacity for provision of medical services to local populations and, concurrently, detection and response to infectious disease outbreaks.  US military medical engagements should be designed to improve the health security of populations in fragile states for the long-term.  In doing so, the US military must integrate military medical engagement activities with other US governmental agencies and entities in order to create, and execute, an integrated strategy for medical capacity improvement.  As a result of these efforts, the US will better its investment for the long-run by enabling fragile states to provide basic health services for their citizens while concurrently increasing their capacity to prevent, respond to, and mitigate public health threats before they potentially become very real threats to the national security of the United States.

As secondary purpose, this paper provides a proposed model for crafting medical engagement strategies supporting the argument for capacity development.

# TABLE OF CONTENTS

## Introduction

Recently returning in October of 2007 after a four month deployment to Latin America, the United States Navy Hospital Ship USNS Comfort steamed back into the port at Bethesda, Maryland with a crew justifiably happy with the humanitarian mission they had just completed. As part of the US President's *Advancing the Cause of Social Justice in the Western Hemisphere Initiative*, the USNS Comfort and crew visited twelve nations providing health care to disadvantaged populations located throughout Latin America. The statistics totaled as a result of the four month deployment read like a public affairs dream: conducted 1,170 surgeries, administered over 32,000 immunizations, dispensed over 100,000 medications, issued more than 24,000 pairs of eyeglasses.[1] The health services provided, complete with surgical, medical, veterinary, dental and other support, medical training of populations in preventive medicine issues, repair of health care facilities, etc., delivered health care to underserved populations throughout the twelve nations visited. Yet, does this four month deployment of a hospital ship mean anything more than a temporary public relations boon to the US? What are the long-term benefits to be gained from the resources committed during this deployment?

On a somewhat smaller scale, we move to Afghanistan, and specifically the Korengal Valley in Kunar Province. The date is May 10 2006, and we see a team of combined Afghani and coalition forces medical personnel providing medical support to the local population of a village. Termed a Medical Civic Assistance Program (MEDCAP) event, the combined team spends six days in the village and treats over 6,300 locals, providing medications and preventive medicine

---

[1] US Southern Command, "USNS Humanitarian Mission Completed," November 16, 2007, under "Fact File," http://www.southcom.mil/appssc/factfiles.php?id=6 (accessed December 12, 2007).

instruction to the disadvantaged population in the surrounding area.[2]  To be sure, this was the first

time in many years that the villagers had received any health services provided by any entity

much less directly by or in conjunction with the Afghan government due to a continued lack of

host nation capacity.  The recent betterment in the security situation and newfound ability for

coalition forces to operate within the valley allowed this team to provide health services, albeit in

a limited manner.  Yet, what does it mean when a combined team of Afghani doctors and

coalition doctors provide acute medical care to local villagers over a six day period and then

depart?

For a third example, we move to the Islamic Republic of Pakistan.  The date is October 8

2005, and an earthquake has just occurred in the far-northern portions of Pakistan.  Centered in

the city of Muzaffarrabad, the earthquake's effects are felt throughout the Northwest Frontier

Province of Pakistan and into Afghanistan and both the Pakistani and Indian administered areas

of Kashmir.  The death toll is horrendous, the devastation is horrible, and the President of

Pakistan appeals for international aid.[3]  The US military initially provides helicopter support out

of Afghanistan and continues to incrementally increase its level of disaster relief support until, at

the highest level of support, there are 1,200 US uniformed personnel on the ground providing

transportation, logistics, engineering, and medical humanitarian assistance.  As part of the

medical assistance effort, the US Army deploys the 212th Mobile Army Surgical Hospital

(MASH) from Pirmasens, Germany to northern Pakistan.  While in Pakistan, the personnel of the

---

[2] Dan Huvane, "Medical Civic Assistance Program Helps Korengal Valley Afghans," Defense Press Service, 10 May 2006.

[3] BBC News, "Quake Crisis Overwhelms Pakistan," October 10, 2005, under "Quake Crisis Overwhelms Pakistan," http://news.bbc.co.uk/1/hi/world/south_asia/4324534.stm (accessed November 22, 2007).

212<sup>th</sup> MASH treat over 35,000 patients in a coordinated manner with Non-Governmental

Organizations (NGO), Inter-Governmental Organizations (IGO), and the Pakistani government.

Upon redeployment, the 212$^{th}$ MASH equipment, all \$4.6 million worth of it, is donated by the

US government to the government of Pakistan in order to better enable the Pakistani government

to continue providing medical support of its population.[4]  The MASH equipment set was among

other logistical and engineering equipment donated to the government of Pakistan upon the

conclusion of the US support to the relief effort.  We could ask ourselves, however, what does it

mean that the personnel of the 212$^{th}$ MASH treated over 35,000 patients while in Pakistan and the

US donated an entire medical unit's complete equipment set comprising an 84 bed surgical

hospital to the government of Pakistan?[5]  What long-term benefit may the US see out of its

investment?  Or better yet, is it correct to expect to see long-term benefits from investments like

these?

In the three examples depicted we have health services provided by the US military in

support of foreign populations that span the spectrum of military operations:  peacetime

engagement, conflict, post-conflict reconstruction, and disaster response.  The questions posed at

the end of each scenario are typical of questions that may often be overlooked regarding medical

operations in support of local nationals due to the justifiable euphoria of a job well done and

publication of impressive statistics touting a great multitude of patients seen and treated.

Although impressive statistics make for good publicity; asking the hard questions of what those

---

[4] US DoD, "DoD Assistance to Pakistan," February 21, 2006, under "Fact Sheet,"
http://www.defenselink.mil/home/features/2005/Pakistan/Fact_sheets/20062702a.html?storyID=123013273
(accessed November 25, 2007).

[5] Author's note:  This is apart from the specifically fiscal question of whether the US would
actually save money by donating the equipment due to re-deployment costs.

statistics really mean does not make for such great publicity. However, these are types of questions that must be answered in order to properly identify when and in what manner should the US military provide health services support to local populations in the current operating environment. Moreover, the essential question is this: Is the way the US military provides health services support via medical engagement the proper and most efficient way US military medical resources can be employed to further US governmental, or even military, objectives? This is but a portion of the larger debate of how the role of military forces, and military power, is evolving to address current and future challenges. As the debate revolves around the question of what is the evolving nature of the role of the US military, particularly in a world of asymmetric threats, it follows that a portion of this debate involves the critical question of what role should US military medical resources fulfill in support of US military objectives, which, in turn, support US foreign policy objectives.

This paper clearly defines and evaluates how medical engagements are currently conducted by US military, and primarily US Army, medical personnel. The author contends that US military medical resources can be better leveraged in order to support US foreign policy objectives by looking beyond the current manner of medical engagement with foreign governments and population groups under auspices of security cooperation and Humanitarian and Civic Assistance (HCA) activities. Specifically, medical engagements should be focused on development of fragile states capacity for provision of medical services to local populations and, concurrently, detection and response to infectious disease outbreaks. More fully, US military medical engagements should be designed to improve the health security of populations in fragile states for the long-term. In doing so, the US military should integrate military medical engagement activities with other US governmental agencies and entities in order to create, and execute, an integrated strategy for medical capacity improvement. As a result of these efforts, the US will better its investment for the long-run by enabling fragile states to provide basic health services for their citizens while concurrently increasing their capacity to prevent, respond to, and

4

mitigate public health threats before they potentially become very real threats to the national security of the United States.  As secondary purpose, this paper provides a model for crafting a medical engagement strategy supporting the argument for capacity development that best expresses the military medical support to "soft power," that power expressed through other than sheer military might.

When looking at the role of medical forces in the current environment, attention should be paid to what exactly is understood by the threat posed by infectious diseases and why fragile states are increasingly of importance to the US.  Then we shall explore past and current methods of medical engagement and the current critique of medical engagements in order to provide a foundation for the argument for modification to medical engagement practices.  The departure point for this argument is a discussion of the level of importance of fragile states to US national security.

## US National Security: Fragile States and Health Security

### The New Reality?

We live in the age of Pandora's biological box.  A sprinkle of ebola here, avian influenza there, a dose of public panic and chaos there, maybe mixed with some *e.coli* there, the increasingly interdependent and interconnected world almost ensures that the ills seen in one land will be felt by all.  This is particularly so with the increasing threat posed by the possibility of the transnational spread of infectious disease.[6]  Laurie Garrett in *Betrayal of Trust The Collapse of Global Public Health* states the danger the international community faces is "the world's

---

[6] Jennifer Brower and Peter Chalk, *The Global Threat of New and Reemerging Infectious Diseases: Reconciling US National Security and Public Health Policy* (Santa Monica: Rand, 2003), 95.

microbial killers; the causes of acute respiratory infections and diarrheal diseases, tuberculosis, malaria, measles, pertussis, hepatitis B and C infections, neonatal tetanus, AIDS, and dengue fever."[7]  These well known infectious diseases will remain constant threats for the majority of the world's population but are increasingly accompanied by new or re-emerging infectious diseases such as avian influenza or Severe Acute Respiratory Syndrome (SARS) that pose a potential for a devastatingly global impact.  Gone are the days when the concept of US national security could be summarized in the simple phrase:  Our tanks are bigger, better, faster, and more powerful than their tanks.  The reassurance of that simple statement, so elemental in its mathematical precision and ease of calculation, has been replaced with a world replete with threats; some uniformed, some not, some declared, some not, and some state-oriented, but most not.

The transnational nature of threats reaching across borders is reflected in the 2006 *National Security Strategy of the United States* (NSS) in that: "Many of the problems we face—from the threat of pandemic disease, to proliferation of weapons of mass destruction, to terrorism, to human trafficking, to natural disasters—reach across borders."[8]  The NSS reflects the changing thinking in respect to national security and the rise of other factors separate from state or non-state actors which are seen as threats.  In the current environment, not only are state and non-state actors seen as potential threats, but so too now are *forces* seen as threats.  As an example of this changed thinking, the NSS describes the specific threat faced by the possibility of the spread of biological weapons that could potentially impact the US.  In response to the threat of biological weapons, the US is focusing on establishing a global surveillance network and improving the

[7] Laurie Garrett, *Betrayal of Trust: The Collapse of Global Public Health* (New York: Nyperion, 2000), xi.

[8] George W. Bush, *National Security Strategy of the United States of America* (Washington, DC: Government Printing Office, 2006) 2.

capacity to detect and respond to outbreaks of contagious diseases within states precipitated by terrorist elements. In doing so, the capacity of states to detect public health emergencies, before "it's too late," is being improved as a preventive measure relative to US national security. This increased capacity in detection and response to the spread and potential use of weaponized biological material improves the capacity to respond to such outbreaks as pandemic influenza,[9] and is an example of what is described as the need for new and innovative strategies and responses[10] as described in this paper.

The reality of the transnational spread of disease is a very real threat to the US in the current environment and will more than likely only increase in probability in the future. Unfortunately, these threats do not have a corresponding anthropomorphic enemy or adversary that can be targeted.[11] Jennifer Brower and Peter Chalk in *The Global Threat of New and Reemerging Infectious Diseases Reconciling US National Security and Public Health Policy* specify that the transnational spread of disease poses a threat to states due to six reasons: (1) the disease kills, (2) the impact on public confidence in the abilities of the government to respond to the threat, (3) the direct and indirect impacts on the economy, (4) the fact that they can have a detrimental impact on the greater social order, (5) they may serve as a catalyst for regional instability, and (6) the threat posed by biological weapons use during armed conflict or terrorist events.[12] This poses a dilemma for the US military in that it typifies the worst possible form of threat from a patently military perspective: a threat that is posed without a corresponding enemy

---

[9] Ibid., 21-22.

[10] Ibid., 47.

[11] Brower and Chalk, *Global Threat*, 3.

[12] Ibid., 7-9.

or adversary to leverage military power against in order to deter or defeat the threat. This concept transcends the debate over state and non-state actors and how best to leverage military power against non-state actors due to the nature of a disease posing a potential public health hazard that is the identified threat. Worse than that, however, is the veritable plethora of pathogens with a corresponding infinite number of scenarios that can be conjured up to show how something like an emerging infectious disease can be a threat to US national security with a corresponding lack of enemy or adversary that traditional military power can be best applied against. Even if initiated by a terrorist element, the disease itself becomes the threat once it has been transmitted to any population group in terrorist use of biological weapons of mass effect scenarios. Thus we have the focus on detection of the release of weaponized biological material as specified in the NSS.

The threat of infectious disease is nothing new of course; we need only speak aloud the words "bubonic plague" and "black death" to imagine a situation of near complete and total destruction of a society by infectious disease.[13] As such, infectious diseases are a threat that have been with us since the origins of the human species, yet the recent concern for avian influenza and resultant possibility of a pandemic influenza event affecting millions of individuals is what has driven the new concern for infectious disease as a national security issue.[14] More fully, the sheer rapidity and probability for the wide-spread infection of millions of people that show no respect for lines drawn on a map is what poses a significant risk for the US. Yet, how do you

---

[13] Author's note: From a simple internet search for "black death" and "bubonic plague." The result is thousands of references to accounts of infectious disease outbreaks that devastated portions of the Earth at differing times and have come to typify the near total destruction a society may endure due to pandemics resulting from infectious disease.

[14] Patrick Stewart, "Weak States and Global Threats: Fact or Fiction?" *The Washington Quarterly* (Spring 2006): 40.

posture military forces to fight against the possibility of an infectious disease spreading from afar?

At the crux of the new reality is the question: How should the US military posture to fight a very real possibility of an emergent public health hazard that is transnational in nature originating from a state that may or may not have the capacity to properly respond to, and prevent, a public health emergency before it poses such a threat? For the purposes of this paper, an *emergent public health hazard* is defined as: "an infectious disease or product-associated danger with three general attributes: First, such a hazard victimizes relatively soon after exposure. Second, the potential exists for the hazard to spread, by one means or another, to many more victims far beyond the points of origin or discovery (unlike a plane crash or bridge collapse). Third, the hazard embodies a large measure of novelty, which facilitates uncertainty and even panic."[15] Any scenario conjured involving the spread of infectious disease can easily fit within the three attributes as stated. These three attributes combine into what can best be described as a *public health emergency*. Fittingly, for the purposes of this paper, the term public health emergency will be used to describe the resultant effect an emergent public health hazard has on the public. Now that we have identified the very real threat of infectious disease, we are now required to determine why fragile states are so important in this new reality.

## Why Fragile States?

As Stewart Patrick states in *Weak States and Global Threats: Fact or Fiction?,* the "growing concern with weak and failing states is really based on two separate propositions: first,

---

[15] Christopher H. Foreman Jr., *Plagues, Products and Politics: Emergent Public Health Hazards and National Policymaking*, (Washington, DC: The Brookings Institution, 1994), 7.

that traditional concepts of security such as interstate violence should expand to encompass cross-border threats driven by non-state actors (such as terrorism), activities (crime), or forces (pandemics); and second, that such threats have their origins in large measure in weak governments in the developing world.  Fragile states are those states that are on the verge of failing and, as such, could pose a very direct and real threat to US national security in the very near future under a multitude of scenarios.  As with most things international there is a bit of ambiguity in respect to the definition of a fragile state.  Generically speaking, a state is considered weak or fragile if it fails to meet the basic needs of its population.[16]  The ambiguity may arise with the precise definition of basic needs and what level of failure must be achieved for the state to be considered fragile. In specifically looking at fragility, or weakness, the measurement of three areas is often looked at in order to define the particular typology of weakness resident within a state:  security gap, capacity gap, or legitimacy gap.[17]

A security gap is when a state is not able to provide a level of assurance of personal security for the populations within the state's borders.  Areas where state security forces do not exert full control, such as in the Federally Administered Tribal Areas (FATA) of Pakistan, is an example of a state having a security gap.  The US Agency for International Development (USAID) classifies this type of state as a fragile state in *crisis* whereby the state does not have

---

[16] Stewart, "Weak States and Global Threats", 29.

[17] Jeremy Weinstein and John Edward Porter and Stuart E. Eizenstat, *On the Brink: Weak States and US National Security*, (Washington, DC: The Center for Global Development, Commission for Weak States and US National Security, 2004), 14-15.

effective control over a portion of its territory, and as such, can not provide services within those areas.[18]

Capacity is the sum of the ability, capability, and desire to provide for the population within the state's borders. The state must have the infrastructure, as defined by materiel, equipment, financial resources, and personnel, necessary to provide services to the population and then must willingly provide those services. The willingness of a state to provide services can often be the primary obstacle; particularly in respect to disenfranchised ethnic groups which may be located within a state. USAID classifies states with a capacity gap as *vulnerable* fragile states. *Vulnerable* states are those that have a government that does not have either the willingness or the ability to provide services to its population.[19] This capacity gap is the environment where a lack of ability or desire to properly deal with public health emergencies can lead to regional or even international instability due to an inability of the government to effectively respond to a public health emergency and the resultant spillover effects. Adding to the level of complexity is the fact that a lack of capacity is often inextricably linked to the existence of some form of a security gap in that capacity can quite often only be fully and efficiently expressed in a secure environment.

A legitimacy gap is when the actions of the government are questioned by any number of groups: ethnic or tribal groups, political parties, NGOs, the international community, etc, to such a degree that the actions of the government are perceived as illegitimate by any or all parties separate from the government. Fragile states, by definition, need assistance in order to develop

---

[18] US Agency for International Development, *USAID Primer: What We Do and How We Do It*, (Washington, DC, 2006), 4.

[19] USAID, *Primer*, 4.

either their capability, desire, or both to provide services for the population to some degree and thereby retain a perception of legitimacy amongst the population.

A state could be fragile in some areas and not so fragile in others. Therefore, a single typology template of fragility can not be laid upon a state in a generic manner. [20] A detailed analysis of each state in question is required in order to identify the sources of fragility resident in a particular state itself. The purpose of the analysis, from the medical perspective, is to attempt to determine the source(s) of fragility that disallow(s) the state to provide basic health services to the population. In doing so, a better appreciation will be gained for the particulars of the nation in question and a medical engagement strategy can be better developed in order to best integrate medical efforts in a whole of government approach to dealing with fragile states. This will better prevent the fragile state from becoming the true pariah of the international community: the failed state.

When fragile states fail, the state has weakened to such a degree that there is no real government providing any measure of security or services for the population. Failed states are infinitely more complex than fragile states in that they most often must be rebuilt from the ground up. As such, a desired objective must be to prevent the fragile state from failing. In enabling a states medical capacity US military medical forces can assist the totality of US governmental engagement with fragile states and adhere to the direction of the US *National Defense Strategy* whereby the US military should influence events before challenges become more dangerous.[21]

---

[20] United Kingdom Department for International Development, *Why We Need to Work More Effectively in Fragile States*, January 2005, under "Fragile States," http://www.dfid.gov.uk/pubs/files/fragilestates-paper.pdf (accessed December 2, 2007), 7.

[21] Donald H. Rumsfeld, *National Defense Strategy of the United States*, (Washington, DC: Government Printing Office, 2005) 3.

By focusing on capacity development, US military medical forces can assist fragile states in capacity development for provision of health services to its citizens which, in turn, enables the government to respond effectively to public health emergencies. As a result of these efforts, the government is enabled across all aspects of governance, and particularly in respect to legitimacy. This, in turn, provides more long-term benefit for both the US and the fragile state.

Many governments are increasingly recognizing the importance of fragile states. For instance, the United Kingdom Department for International Development (DFID) states very bluntly in *Why We Need to Work More Effectively in Fragile States* that a fragile state can destabilize regional areas and pose a threat to global security.[22] Logical as it may be, DFID makes the argument that donors have been reluctant to be proactive in helping fragile states and prefer to provide response to humanitarian crises ex post facto.[23] This theme of treatment versus prevention is one that resonates throughout this discussion and will be explored more fully in the analysis of US military medical efforts and how US military medical resources can better focus efforts on improving the health security of local populations.

## Why Health Security?

Human security is a term that was first discussed in a public forum by the United Nations Development Program in 1994.[24] Human security is a continually emerging concept that transcends the traditional concepts of security that are often state centric and places the individual human at the center of the discussion of security; thus the debate on what is meant by national

---

[22] DFID, *Work More Effectively in Fragile States*, 4.

[23] Ibid., 5.

[24] John D. Montgomery and Dennis A. Rondinelli, *Beyond Reconstruction in Afghanistan: Lessons From Development Experience* (New York: Palgrave Macmillan, 2004), 196.

security and how the concept of national security continues to evolve. Human security focuses on the needs of the individual human element. As a part of the concept of human security is a component part being that of *health security*. Health security is defined by the assurance of basic public health needs and freedom from disease of the individual. More fully, health security is an all encompassing term that describes the vulnerability of populations to health risks such as the re-emergence of infectious diseases that are known so well, such as influenza, as well as emerging infectious diseases that take center stage due to their very public and very destructive debut on the world stage, such as Acquired Immunodeficiency Syndrome (AIDS).[25]

In fragile states that can not, or will not, provide for the basic health needs of their citizens, thereby not assuring their citizens health security, we have an environment ripe for crises. As these potential crises could rapidly spread across borders, attention should be paid to enabling fragile states to care for their citizens. Irrespective of the threat of infectious disease itself crossing borders, there is also the threat of a complex humanitarian emergency developing whereby conditions combine to create a humanitarian crisis which could destabilize a region as well. As such, the scope of this paper will be limited to those states that do not provide health security for their citizens and such states will be identified as a *medically vulnerable fragile state*. It is assumed that if the state could not meet the health needs of its citizens as a matter of routine, it would not be able to meet health needs in respect to an emerging public health hazard and resultant public health emergency. Frederick M. Burkle Jr. in *Globalization and Disasters: Issues of Public Health, State Capacity, and Political Action* reinforces this assumption when he states: "Disasters keep governments honest: They define a state's capacity to protect its population while

---

[25] World Health Organization, *Issues Paper: Invest in Health, Build a Safer Future* (Geneva Switzerland: WHO, 2007) under "World Health Day 2007," http://www.who.int/world-health-

exposing its vulnerabilities to political upheaval in the aftermath of a poorly managed crisis."[26] Dr. Burkle continues to describe how disasters predominately identify capacity gaps in the entirety of a states healthcare system and, thereby, pose a threat to the health security of the population.

Yet, why is the health security of populations in fragile states important enough to warrant the US military to focus resources in addressing the problems of *medically vulnerable fragile states* in providing health services for their citizens? Simply put, the focus on capacity development will lead to long term improvements at all levels of the affected state that will more fully support US strategic objectives that transcend the entire spectrum of US military engagement and not just those resident within the medical community.

The US military should adapt in some form or fashion if it is to address these emerging threats and remain relevant. As part of this adaptation is a changed perspective of the proper roles and missions US military medical forces play in conducting medical engagements. There will always remain an enduring requirement for the short-term, acute medical engagement, as when passing out medications to treat acute illnesses and injuries in a remote village in the mountains of Kosovo on a one-time basis is beneficial. However, for the long-term, medical engagements and their integration into an enduring strategy focusing on capacity development will provide better benefit for US national security. In the discussion of health security in fragile states attention has been paid to the "what" and "where" of medical engagements, now we will analyze the "how."

---

day/previous/2007/activities/issues_paper/en/index.html (accessed December 12, 2007), 2.

[26] Frederick M. Burkle, "Globalization and Disasters: Issues of Public Health, State Capacity, and Political Action," *Journal of International Affairs* (Spring/ Summer 2006): 241.

# US Military Medical Engagement:  Past and Present

Before answering what more can the US military do, or, more precisely, how should the US military provide what type of medical support to *medically vulnerable fragile states*, a brief overview of the history of US military provision of medical support to local populations and engagement is required in order to place current practices in context with historical precedent. Closely followed by this is the requirement for an overview on how medical engagement events are planned, resourced, and executed in the contemporary operating environment.  The intent is to determine where and how the US military arrived at its current practices in order to provide a framework for the current critique of US military medical engagements.

For purposes of this paper, *medical engagement* (ME) will be used as an all-inclusive term describing any event that has any number of uniformed US military medical personnel providing medical treatment, education, advice, exchanges, etc. to an individual or group of local national civilian or military population during peacetime or the opening phases of major combat operations.  Medical engagements typically fall under two categories:  those undertaken under the auspices of Theater Security Cooperation (TSC) programs and designed for military-to-military engagement, hereafter referred to as *TSC medical engagements*, and those taken under auspices of US Code Title 10 authorized Humanitarian and Civic Assistance (HCA) programs designed for military-to-civilian engagement, hereafter referred to as *HCA medical engagements.* The term *Medical Civic Action Program* (MEDCAP) will be reserved for description of the provision of medical treatment to local nationals by US military medical personnel during conflict, post-conflict, or stability operations.[27]  *Medical foreign humanitarian assistance* (MFHA) will be used

---

[27] Author's note:  MEDCAP is a term often utilized loosely to describe any engagement of local populations by US military medical forces.  Medical Readiness and Training Exercise (MEDRETE) is a

to describe provision of medical support to local populations affected by natural or man-made disasters.  Each of these categories of medical support of local populations will be explored more fully further in this paper, but for now we must briefly look backwards in time in order to look forwards to the future.  The intent of looking back in order to look forward is not to complete an exhaustive study of provision of health services to locals by Us military formations, but to gain an appreciation that provision of such services has occurred throughout the history of the US military departments.

## Looking Back in Order to Look Forward

Prior to the US Civil War, the US military provided little or no health services support to local, civilian populations other than that provided from the garrison post surgeon on the frontier outpost.  The post surgeon, while tasked to provide support to Army personnel only, would often care for family members and local civilian populations as well out of sheer necessity and despite any guidance from the Army Medical Department.[28]  As it wasn't until 1812 that the US Army Medical Department was granted a permanent standing, the focus of the previous Continental Army Hospital Department was on survival and doing the best that could be done with what resources were provided.[29]  It was not until the post-Civil War period that the US military had

---

term utilized to describe US military medical engagements specifically under auspices of the HCA program as well.  To add to the complexity, the terms MEDCAP, MEDRETE, medical humanitarian assistance, and medical engagement are typically used interchangeably in practical application.  For purposes of this paper, and to provide clarity, the term MEDCAP will be used strictly to define medical engagements conducted during conflict, post-conflict, or stability operations while medical engagements will be denoted as either *TSC medical engagements* or *HCA medical engagements*.

[28] Mary C. Gillet, *The Army Medical Department: 1818- 1865*, (Washington, DC: Center for Military History, 1987), 34, under "OTSG History," http://history.amedd.army.mil/booksdocs/civil/gillett2/frameindex.html (accessed December 12, 2007).

[29] Gillet, *The Army Medical Department: 1818- 1865*, 28.

both the capability and desire to provide some level of medical services to local populations, including disaster response capabilities, as a direct result of improvements in the organization and capabilities of medical services spawned by conflict. In doing so, medical services were, and are, provided to local populations for primarily three reasons: (1) to win the "hearts and minds" of the local populace (2) as a preventive measure to guard against service-members illness due to close proximity with local populations, and (3) as disaster relief in support of natural or man-made disasters.

When looking to win the "hearts and minds" of the locals, as during the conduct of counter-insurgency operations, the provision of medical services is intended to influence the population to look favorably on US and host nation operations. As such, provision of health services to underserved populations is targeted at those populations who may be of benefit to US or coalition forces.[30] In guarding against disease medical services may be provided to those civilians living in proximity to US forces. As the local population is at risk for disease, US forces living in proximity to these local populations are increasingly at risk as well. Therefore, providing some level of health services may be born out of a direct need to protect the force and as a defensive measure warding against the spread of disease.

In the Mexican-American War, we see the first evidence of large-scale public health efforts undertaken by US occupation forces during conflict and post-conflict operations in foreign lands that may have set a trend for future military operations. Faced with epidemics of malaria,

---

[30] Author's note: For some, there may be an ethical dilemma in this situation in that the provision of health services is seen as a reward or a tool of persuasion separate from providing health services to those in need. In other words, a population may be provided some level of health services, such as a MEDCAP event by US forces, simply since there is something desired of the population by maneuver forces, e.g. the possibility of gaining passive intelligence on enemy forces, as opposed to the more egalitarian and benevolent purpose in providing health services to underserved populations in of itself.

yellow fever, and dysentery, US forces occupying Vera Cruz and Mexico City enacted and enforced public health regulations that ensured clean and sanitary water storage facilities and removal of refuse littering the streets.[31]  These efforts were required as medically related interventions in order to protect US forces by indirect means of requiring the citizens to obey sanitation regulations that improved their health and well-being, thereby decreasing the risk they posed to US forces.  Improving the sanitation of the locals directly improved their health and diminished the threat faced by US forces.[32]  Efforts such as those undertaken were intended more at protecting the health of US forces rather than providing direct health services to Mexican citizens out of any local need.

During the Spanish-American War, US forces operating in the Philippines provided medical services to locals in order to win the "hearts and minds" of the populace.  Direct health services were provided in order to attempt to turn the local populace against supporting insurgents fighting US forces.  Though the term Medical Civic Assistance Program (MEDCAP) would not be in vogue for many decades to come, this is the first environment where medical resources were utilized in such a civic action mode for furtherance of US military objectives.  US forces also created Boards of Health in order to address public health requirements and engage the local populace in order to increase public health awareness and prevent disease. [33]  For instance, the Philippine Board of Health was established and involved itself in the education of mothers in a

---

[31] Ralph Loren Erickson, *The Historic Role of Military Preventive Medicine and Public Health in US Armies of Occupation and Military Government*, (Washington, DC:  The Borden Institute, Walter Reed Army Medical Center), 61, under "Borden Institute," http://www.bordeninstitute.army.mil/published_volumes/mpmVol1/PM1ch3.pdf (accessed January 9, 2008).

[32] Gillet, *The Army Medical Department: 1818- 1865*, 112-125.

[33] Erickson, *The Historic Role of Military Preventive Medicine and Public Health*, 64.

maternal health education campaign in order to attempt to decrease infant mortality rates within the Philippines.[34]  US forces also established sanitation regulations, similar to those established in Mexico, and enforced local population compliance with regulations.  Not just people, but animals[35] too were the target audience of US health services in the Philippines as widespread immunization of livestock succeeded in abating the effects of rinderpest and surra.[36]  US military medical efforts in the Philippines evolved from providing medical care to US forces and public health assistance to local citizens to providing direct medical care to locals due to perceived need and ingenuity in allocating medical resources to further US objectives.  This resulted in the first action of civic assistance to local populations by the US army during counter-insurgency operations.[37]

During World War I, US military medical services were stressed almost to, and perhaps beyond, the breaking point in providing health care to the members of the American Expeditionary Forces (AEF) leaving little interest, and little capability even if the interest existed, in providing support to locals affected by the fighting.  This became even more apparent after the influenza epidemic of 1918 which affected the AEF significantly.[38]  However, efforts during

---

[34] Mary C. Gillet, *The Army Medical Department: 1865- 1917: Public Health in the Philippines*, (Washington, DC: Center for Military History, 1995), 305, under "OTSG History," http://history.amedd.army.mil/booksdocs/spanam/gillet3/frameindex.html (accessed January, 31 2008).

[35] Author's note:  Events such as these are commonly referred to as Veterinary Civic Assistance Program (VETCAP) activities.

[36] Erickson, *The Historic Role of Military Preventive Medicine and Public Health*, 64-65.

[37] Robert J. Wilenksy, *Military Medicine to Win Hearts and Minds:  Aid to Civilians in the Vietnam War* (Lubbock, TX: Texas Tech University Press), 7.

[38] For a thorough overview of US military medical support to the AEF during World War I, see Jonathan H. Jaffin, Medical Support for the American Expeditionary Forces in France During the First World War (FT Leavenworth, KS: US Army Command and General Staff College, 1991) under "World War I medicine," http://cgsc.cdmhost.com/cgi-

World War II were targeted at both wholesale reconstruction of local healthcare systems as well as provision of health services to local populations in both Germany and Japan. In occupied territories, efforts for provision of health services to local populations were primarily provided under auspices of Civil Affairs Public Health Units which sought to utilize local capabilities to meet health needs.[39] Faced with large scale internally displaced personnel populations in Germany, US and allied forces were overwhelmed by the requirement to provide health services to locals. Therefore, allied forces were required to direct medical resources intended for support of allied forces to efforts supporting locals.[40] Particularly in Germany, typhus posed a challenge,[41] and sanitary measures were taken in order to improve the conditions of locals including establishment of delousing stations and widespread fumigation practices.

During military operations in the Korean Conflict, US military medical personnel provided some level of health services to the local nationals although any form of medical support was primarily provided on a rudimentary and reactive basis.[42] However during the Vietnam Conflict use of medical resources to support local populations was extensively utilized throughout the duration of US forces involvement in Vietnam. During operations in Vietnam, we

bin/showfile.exe?CISOROOT=/p4013coll2&CISOPTR=1382&filename=1383.pdf (accessed April 18, 2008).

[39] Blanche B. Armfield, *Medical Department United States Army in World War II: Organization and Administration In World War II*, (Washington, DC: Center for Military History, 1963), 364, under "OTSG History," http://history.amedd.army.mil/booksdocs/wwii/orgadmin/frameindex.html (accessed January 31, 2008).

[40] Ibid., 46.

[41] Erickson, *The Historic Role of Military Preventive Medicine and Public Health*, 69.

[42] See Frank A. Reister, *Battle Casualties and Medical Statistics: U.S. Army Experience in the Korean War* (Washington, DC: The Surgeon General) for an overview of what population groups the US Army provided medical services to during the Korean War. Specifically on page 65, the category of "other" in regards to total hospital admissions shows the magnitude of provision of care to local personnel.

have the first use of the term Medical Civic Action Program (MEDCAP) as set forth in a joint

proposal of the US Embassy and Military Assistance Command- Vietnam (MACV) in 1962.[43]

Special Forces medical personnel initially provided health services to local populations under

auspices of the MEDCAP program and, as the benefits of MEDCAP activities were realized,

medical assets of general purpose forces were increasingly included in the program. To "win

hearts and minds," gather intelligence, and "do good," US forces continued to provide various

health services to local populations that spanned the length of US involvement in Vietnam in a

number of programs.[44] Provision of medical support was but a portion of the larger MAC-V

pacification campaign with the objective of drawing the local population away from supporting

enemy forces. MEDCAPs ranged in scope from small-scale clinic visits to remote areas to

establishment of medical treatment facilities in conjunction with the government of Vietnam. As

a result of MEDCAP efforts from 1963 to 1971, "almost 40 million encounters between

American military physicians and Vietnamese civilians occurred."[45]

Beyond the MEDCAP itself, the US government also provided training and capacity

development for indigenous entities within Vietnam. For example, the Military Provincial

Hospital Augmentation Program (MILPHAP) provided US augmentation of local provincial

hospitals with US military medical personnel in order to bolster local capabilities. This was a

truly joint venture in that all services: Army, Navy, and Air Force provided 16 personnel teams to

---

[43] Spurgeon Neel, *Medical Support of the U.S. Army In Vietnam 1965-1970*, (Washington, DC: Center for Military History, 1991), 164, under "OTSG History," http://history.amedd.army.mil/booksdocs/vietnam/medicalsupport/frameindex.html (accessed January, 31 2008).

[44] Wilensky, *Military Medicine to Win Hearts and Minds*, 4.

[45] Ibid., 4.

augment hospitals.[46]  Additionally, at the height of the Vietnam conflict, it was determined that sufficient capacity did not exist within Vietnam to care for the number of civilian casualties.  The Civilian War Casualty Program (CWCP) was established in 1967 in order to provide health services in a more direct manner.  Under this program, hospitals were built and staffed by the US military specifically for treatment of civilians.[47]

The then recently established US Agency for International Development (USAID) provided funding for provision of medical services to the local population as well,[48] and was instrumental in capacity development of local capabilities.  For instance, USAID established a Provincial Health Assistance Program (PHAP) in order to improve the training of local healthcare providers and improve local hospital capabilities.[49]  Although USAID focused primarily on capacity development while the US Army focused on provision of "grass roots" medical care to populations using organic medical personnel, the efforts were coordinated in an attempt to create a cohesive approach to provision of health services to locals.  This coordination at the lowest level between USAID and the US Army is typical of that which is often seen during times of conflict, yet may not be reflected as often during "peacetime."

In the closing stages of the 20th century, peace operations conducted in such places as Bosnia and Kosovo provided the US military with the perfect opportunity to utilize MEDCAP activities in order to provide health services to populations of interest.  MEDCAPs were provided

---

[46] Neel, *Medical Support of the U.S. Army In Vietnam 1965-1970*, 163.

[47] Ibid., 166.

[48] Wilensky, *Military Medicine to Win Hearts and Minds*, 43.

[49] Neel, *Medical Support of the U.S. Army in Vietnam 1965-1970*, 162-163.

to local villages in a manner similar to that seen in Vietnam in that a team would visit a village of tactical interest and provide acute care for a specified period of time.

Separate from US military medical operations during conflict, disaster relief requirements also rose to prominence after the Civil War due to the US military, and specifically the US Army, having the medical organization and resources in order to provide relatively rapid and efficient response to disasters occurring within the US. As strategic lift capabilities were improved, US military resources were increasingly seen as disaster response capabilities spanning the globe.

As this brief review of the past has shown, during the history of the US military, from the Civil War on, medical services have been provided to local populations for a variety of reasons in support of US military operations and US foreign policy objectives. Now that an understanding of the historical precedent for US military medical resources being allocated in support of local populations has been reached, we must examine how those operations are conducted in the current environment.

## Current Methods and Practices: The Best of Intentions

The sheer scope and nature of the entities involved combined with the dizzying array of fiscal, regulatory and legal authorizations and limitations[50] for the conduct of medical operations in the current environment provides a daunting learning curve in the attempt to develop a complete understanding of the way US military forces currently conduct medical engagements. In analyzing the manner and method US forces conduct medical operations in support of local

---

[50] For a thorough analysis of the relevant entities and agencies involved in the medical engagement process, see Appendix 1: Medical Engagement Structural Analysis: From Policy to Boots on the Ground to this paper.

populations we must fully explore the typology of these events:  TSC and HCA engagements,

MEDCAPs, and disaster response, and then explore the critique of current practices.

## Military Medical Engagement:  Peacetime

Medical engagement activities during peacetime operations are a by-product of the

overall Theater Engagement Strategy developed by Geographical Combatant Commands (GCC).

The strategy provides the purpose and direction for the development of a Theater Security

Cooperation (TSC) strategy and is supported in execution by Service Component Commands,

and, thereby, the individual services.  Under the auspices of Security Cooperation, the GCC

develops a TSC strategy in order to enable partner nations to develop the capacity to defeat

threats and foster relationships between US military forces and local military forces which will

further work to assure access to areas of the world.  In effect, the TSC strategy links the military

activities of the GCC service component commands with other US governmental activities.  As

TSC events are most prevalent during Phase 0 and I of joint operations,[51] these medical events

fulfill the medical portion of the TSC strategy and are funded under Traditional Commander's

Activities (TCA) accounts.  Medical TCA events are quite often something as simple as a small

number of medical personnel conducting an engagement with counterparts in a state's military for

a limited duration, but could be as elaborate as a medical exercise such as US European

Command (EUCOM) MEDFLAG whereby large medical units deploy and provide wide-ranging

assistance to local populations.  Peacetime engagement efforts range from military-to-military

contacts to training, exchanges, conferences, etc. and are designed to foster military to military

---

[51] More clearly, as outlined in JP 3-0, security cooperation efforts continue through all six phases of a campaign model joint operations.  However, primary focus of security cooperation efforts is typically during Phase 0, Shaping, of the campaign.

contacts and develop mutually beneficial relationships between the US and local military

leadership and forces. TSC activities are funded through the yearly Planning, Programming,

Budgeting, and Execution (PPBE) and, as such, compete with other programs for resources.[52] To

add to the complexity, there are a multitude of funding streams for specific TSC events such as

the Warsaw Initiative Funding (WIF) and the Cooperative Threat Reduction (CTR) funding for

specific exercises and capacity development that tends to blur any distinctions between the

objectives of specific programs.

Complementary to TSC activities, medical engagements are also resourced and executed

under authority of Title 10 Section 401 of the US Code which authorizes a Humanitarian Civic

Assistance (HCA) program that promotes the security interests of the US while concurrently

providing training to US forces.[53] Any benefit to the local population provided by engagements

under HCA auspices is incidental to the requirement to provide training for US forces as specified

by the code. Medical HCA events are those that are conducted by US military medical personnel

providing such support as in the USNS Comfort mission to Latin America. HCA, as described, is

a form of stability operation for the US Army, [54] which is intended to assist the government in

providing for their citizens. HCA activities are funded by DoD Overseas Humanitarian, Disaster

and Civic Aid (OHDACA) monies, which are appropriated specifically for HCA activities within

specific nations. Humanitarian Assistance (HA) is a category of HCA which includes provision

---

[52] US Department of the Army, *AR 11-31 Army International Security Cooperation Policy* (Washington, DC, 2007) 4.

[53] United States Code, Title 10, Section 401 (Washington, DC, 2007) and Chairman, Joint Chiefs of Staff, *Joint Publication 1-02 DoD Dictionary of Military and Associated Terms* (Washington, DC, 2001) 245.

[54] US Department of the Army, *Field Manual 3-0 Operations* (Washington, DC, 2008) 3-12.

of rudimentary projects such as building wells, excess property donation, and transportation of privately donated relief by US military resources.[55]

## Medical Civic Action:  Conflict, Post-Conflict, and Stability Operations

Medical operations in support of local populations in conflict, post-conflict, and stability operations range in scope from the prototypical medical team conducting a brief MEDCAP event in a village somewhere such as in Vietnam, Bosnia, Kosovo, Afghanistan, or Iraq[56] to the more elaborate efforts of wholesale reconstruction of a state's medical infrastructure and delivery of healthcare services such as currently being done in both Afghanistan and Iraq.  The former is considered a MEDCAP; the latter is considered the medical portion of nation building.  The medical portion of nation building is completely different from a MEDCAP in that when conducting a MEDCAP the mission is short, simple, and not overly challenging to those providing the support.  When re-building the entirety of a nation's medical infrastructure across all levels, a level of complexity is reached that demands its own analysis and is outside the scope of this paper.

The small-scale MEDCAP itself is quite often integrated in the maneuver plan at Battalion, Brigade, or possibly even Division level.  MEDCAPs are often a tool that the maneuver commander can utilize in order to accomplish any of the objectives described by Dr. Robert J. Wilensky during his conduct of MEDCAPs in Vietnam: gain intelligence, placate local

---

[55] US Department of Defense Security Cooperation Agency, *Strategic Plan 2006-2011* (Washington, DC, 2006) slide 3.

[56] MEDCAPs conducted in conjunction with Iraqi medical forces within Iraq are commonly referred to as Cooperative Medical Events (CME) while those in Afghanistan are labeled Cooperative Medical Assistance (CMA) activities.  CME/As are intended to increase the legitimacy of local forces in providing services for local citizens and "put a local face" on medical engagements.

populations, sway support of local populations away from an enemy or adversary, or simply "do some good" for people in need.  MEDCAP events are primarily targeted at a specific population group and are integrated within the maneuver plan as specific tasks for medical formations to accomplish.  As such, the MEDCAP is often a task conducted within a shaping operation in order to support the decisive operation and usually may be intended to gain the trust of local population groups in pursuit of other than medical objectives.  For example, the attainment of passive intelligence may be an integral objective for the conduct of a MEDCAP in a specific area.  As the maneuver commander may need intelligence from a particular population group, the MEDCAP may be conducted in order to establish a mutually beneficial relationship that provides inroads for development of intelligence useful to the maneuver commander.[57]  MEDCAP events such as these are separate actions from Civil Affairs public health and welfare activities during military operations but both programs may prove complementary with each other.

## Foreign Humanitarian Assistance:  Contingency Operations

JP 1-02 defines foreign disaster relief (FDR) as the provision of humanitarian assistance and transportation of commodities in support of populations affected by natural or man-made disasters.[58]  This is the military definition for the activities the US military conducts when providing disaster response or relief which is categorized as the provision of Foreign

---

[57] This illustrates a further potential for the possibility of conflict in respect to MEDCAPs which is centered around the proper utilization of medical assets and adherence to Medical Rules of Engagement (MROE).  MROE are established by the JTF HQs in order to specify who may be treated by US medical forces during a specific operation.  Quite often, limitation is placed on treatment of local civilians to save "life, limb, or eyesight" or treat those injuries of a local national incurred as a result of US actions.  Thus we may have the possibility of conflict between medical dictates and maneuver requirements.  The reality is that this is often a "personality" issue between the unit surgeon, such as Battalion, Brigade, or Division, and the Commander in that the personality of those involved directly affects any friction that may exist.

[58] JP1-02, 211.

Humanitarian Assistance (FHA).  The level of humanitarian assistance provided potentially ranges across the spectrum of US military capabilities and is subject to the invitation of the government affected by the disaster and subsequent request from the US State Department for US military assistance in responding to the disaster.  US military forces provide FHA that is typically designed to relieve immediate suffering and render aid sufficient to save lives in the immediate after effects of the disaster.  JP 1-02 further explicates that USAID has Lead Federal Agency (LFA) status in rendering FHA and any deployed US military forces will provide assistance in support of the LFA.[59]  Any long-term reconstruction requirements necessary due to the disaster and resultant destruction of infrastructure within the affected area is typically incorporated into USAIDs long-term strategy or possibly the GCC's engagement strategy, if determined as necessary by the Geographical Combatant Commander.  As such, FHA is not designed to rebuild capacity, only to relieve immediate suffering and enable the local government to regain the ability to provide for their citizens in the immediate post-disaster environment.  It is beyond the scope of this paper to analyze FHA as conducted by the US military.  However, there are lessons learned from the conduct of FHA operations that inform the proposed model for medical engagement as outlined in Appendix 2: Proposed Model for Medical Engagement to this paper.

## Current Methods and Practices:  The Current Critique

Now that we have identified the current methods and manner of providing medical support to local populations, we must scrutinize the current critique of these activities and how they are planned and executed.  As the scenario plays out:  the US sends a team of medical personnel into a nation, they drive to the most underserved and remote region of the area and

---

[59] Ibid., 211.

there they spend a few hours or days providing immediate treatment of acute injuries or illnesses. Once the team has reached their allotted time, they pack up their things and depart either for the next village or for good. The level of engagement ranges from the small team of medical personnel providing treatment for a few hundred personnel to the example of the USNS Comfort in the four-month Latin America series of engagements.

Unfortunately, it is quotes like the following which make it into the newspapers of today: "Though the hospital ship Comfort delivered much-needed medical care in Latin America, the recent mission seemed driven more by public relations than public health."[60] This quote reflects a sentiment expressed in the news media in respect to the USNS Comfort mission that could summarize the dilemma of balancing public, or medical, diplomacy, public relations, and actually making a difference. However, it is too simplistic to say that the US military, in conducting medical operations using the current methods and practices, provides little or no real benefit to local nationals, local governments, or US governmental interests itself. Ask the individual who had his cleft palate repaired in Operation Smile[61] whether or not he feels better about his quality of life. Ask the individual given a wheelchair in Afghanistan that improves his mobility about his quality of life.[62] Though for each success story there are also stories that just do not make sense, such as in the Kurdish humanitarian crisis of 1991 and efforts undertaken during Operation Provide Comfort. During the crisis, immunizations were reportedly given by US military medical personnel to the entirety of the Kurdish populations despite protests by personnel from USAID

---

[60] Robert Little, "Feel Good Diplomacy," *Baltimore Sun*, October 28, 2007.

[61] Jeff Drifmeyer, "Toward More Effective Humanitarian Assistance," *Military Medicine* 169, no. 3 (2004) 163.

OFDA. Immunizations were reportedly given for diseases that did not pose a real threat to the population groups and which could conceivably do more harm than good in that there could be a significant impact on the adult immune systems which could make them more susceptible to future diseases.[63] Anecdotal to be sure, but the complexity of the current environment, and less than infinite resources available to the US military demands a clear critique of how medical support of local populations is conducted in order to best determine how and for what purposes it is best to allocate resources.

## Short-Term versus Long-Term Medical Engagements

One of the more common critiques of medical events is that the short-term nature of the event itself results in something less than desirable outcomes for the long-run.[64] This is true for both TSC and HCA activities. As such, a common recommendation is to move away from such endeavors as the provision of short-term, acute treatment and focus more on improvement of the public health stature of the population.[65] Moreover, the difference between a one-time clinic visit and a long-term strategy that is implemented over the duration is at the heart of the current critique. The question is essentially this: What does a one-time visit of a health care professional provide to a population that is continually underserved for health care? The concurrent question

---

[62] Virginia Caudhill, Defense Security Cooperation Agency is a Key Player in Providing Wheelchairs to Afghanistan," *The DISAM Journal of International Security Assistance Management* (Fall 2003): 115-117.

[63] Andrew S. Natsios, *US Foreign Policy and the Four Horseman of the Apocalypse: Humanitarian Relief in Complex Emergencies* (Westport, CT: The Center for Strategic and International Studies, 1997), 111.

[64] Douglas Lougee, "Can We Build a Better Medical Civic Assistance Program? Making the Most of Medical Humanitarian Civic Assistance Funding," *The DISAM Journal of International Security Assistance Management* ( Winter 2007), 68.

[65] Lougee, Better Medical Civic Assistance Program, 69.

from the *TSC medical engagement* perspective is:  What does a one time engagement, military to military contact for example, do for the long-run benefit of either the US or the foreign military?  Better yet, how do you properly assess measures of effectiveness in order to determine how beneficial the actions are truly being when the only frame of reference is one time events disconnected from any long-term strategy?

There is often a continued fascination with immediate actions that have sexy statistics attached to them that can be demonstrated immediately after the event has occurred.  Fact sheets, media statements, etc. are released immediately after the event touting what has been accomplished such as the fact sheeting released after the USNS Comfort mission to Latin America.  Unfortunately, what is not mentioned in any great detail is the future and what the true nature of the impact is after the initial media attention and publicity has waned.  Further, the resultant lack of long-term care could serve to foster more ill will when there is no follow-up care for the acute treatment received.[66]  As in respect to EUCOM's MEDFLAG exercise, there is no assessed long-term benefit on the populations of the nations that are supported.[67]  Long-term projects can provide long-term training opportunities that serve to benefit US military medical personnel in the long run.  Dr Kevin M. Cahill in *A Framework for Survival Health, Human Rights, and Humanitarian Assistance in Conflicts and Disasters*, uses a very simple and eloquent statement to summarize the dilemma between short-term benefits and long-term detriment:

---

[66] Douglas Lougee and Teresa M. Kemmer and Julia Lynch, "An Innovative Medical Civil-Military Operation Training Program," *Military Medicine* 172, no. 2 (2007) 205.

[67] C. John Nickle, The Role of Health Services Support in the Theater Security Cooperation Plan: Do We Have it Right?, (Newport, RI: Naval War College, 2004) 6.

"Transient mirage of well being."[68] Dr. Cahill is describing humanitarian assistance as a macro concept, yet his description is adequate to convey the false sense of well-being a program centered on numbers of patients treated as the primary objective can portray. Indeed, too often is it the case that the fact sheets released immediately after a medical engagement event present nothing more than a temporary mirage that serves to color perceptions and cloud judgments as to what really may need to be done.

## Preventive versus Curative Care

Concurrently with the debate on long-term versus short-term strategies is the debate on curative versus preventive care and treatment. This is more of a philosophically rooted clinical debate that differs in the determination of whether it is more beneficial to provide medical treatment for an illness or injury or provide more education and efforts in order to prevent the illness and injury in the first place. The debate boils down to dollars: is it better to spend money to prevent the possibility of an illness or injury, or is it better to spend money to treat the actual illness or injury once it has occurred? This reflects the dilemma DFID outlines in that nations would rather spend money to respond to an event after the fact than spend monies in order to attempt to prevent an event. The typical focus of medical engagements is to provide acute treatment for minor illnesses and injuries. Anything requiring more definitive treatment above the capabilities of the medical team is referred to "host nation." Inherently this makes little or no sense. The host nation does not have the capacity to meet the basic needs of its citizens, therefore, referral to host nation is quite often a futile endeavor. The presence of an underserved

---

[68] Kevin M. Cahill, ed., *A Framework for Survival: Health, Human Rights, and Humanitarian Assistance in Conflicts and Disasters,* (New York: Council on Foreign Relations and Basic Books, 1993) 9.

population is, of course, the reason the team is allowed to conduct the engagement under auspices of Section 401 of Title 10 and the HCA program.  In fact, the tendency towards acute treatment for such limited durations can lead to no real benefit being felt over the long term.  For instance, Colonel Alan C. Beitler states in *Humanitarian Assistance in Afghanistan: A Prospective Evaluation of Clinical Effectiveness*, that the majority of patient encounters during Medical Humanitarian Assistance activities in Afghanistan with the 48th Combat Support Hospital in support of local nationals resulted in no curative treatments:  "During this final operation 73% (p < 0.001) of patients received care that was unnecessary, unlikely to produce a cure, or was merely supportive in nature.  Conclusions: During HA missions performed by the 48th Combat Support Hospital, the majority of patient encounters did not result in curative treatments. The effectiveness of medical care during HA missions cannot be assumed and future operations should include assessments of outcomes to optimize their value."[69]  The proper balance of curative care and preventive care is required when planning medical events and will be further explored later in this paper.

## What Standard of Care?

Closely following the curative versus preventative debate is, or should be, a debate on what standard of care is provided to local nationals located within foreign nations.  Health care is affected by the structure of the health system and the inefficiencies within the health system to be sure, but how best should local factors be taken into account when determining what the proper standard of care provided should be?  In this area, the simplest answer, that the US military

---

[69] Alan L. Beitler, "Humanitarian Assistance in Afghanistan: A Prospective Evaluation of Clinical Effectiveness," *Military Medicine* 171, no. 9, 889.

provides the best possible standard of care such as that which is provided to uniformed members, is quite possibly not the easiest or most correct answer.  It is common knowledge that the standard of care US military medical departments provide far exceeds the standard of care any populations supported during these activities have ever, or possibly will ever, receive from their national health systems.  The issue is rooted in the ability to provide a standard of care that is acceptable to all parties yet does not introduce the local population to a standard of care that can not be sustained.  In fact, introduction to a level of care that is not at the level of the host nation to provide or sustain can lead to long-term ill will as opposed to the short-term benefit.[70]  Providing state of the art medical care on a one time basis may make the people doing so feel good, but how does that state of the art medical care translate to the local population?[71]

## The Planning Process

The proper planning of TSC and HCA medical events is, arguably, the most critical aspect of the entire medical engagement process.  If the proper coordination during the planning process is not accomplished, the execution of the event will be impacted and may ultimately be flawed in its entirety.  The unfortunate reality is that far too often, these medical engagements are last minute efforts to achieve a specific goal of nothing more than conducting the engagement itself.[72]  The planning process is often subject to a less than perfect and reactive decision-

---

[70] C. John Nickle, Do We Have it Right?, 9.

[71] For example, from the author's experience in providing Combat Lifesaver (CLS) training to personnel in the Tajikistan military.  During the medical engagement, we utilized spring loaded needles and catheters.  We were asked: How do you sanitize them?  Local forces medical personnel had the intent of saving and re-using the needles.  This illuminates the difference between what we in the US Army considered standard practice and what medical personnel in Tajikistan consider standard practice.

[72] From the authors personal experiences as a Medical Planner with 3rd Army, Army Forces Central Command (ARCENT).

making[73] and execution.  Additionally, the planning of the engagement may not take into account the varying stakeholders involved.

As part of the planning process, an appreciation of local factors is of enormous importance in order to craft effective and legitimate activities that are beneficial to all parties involved in both the short and long-terms and is often overlooked.  Attention should be paid to the proper balancing of medical training and education with the level of knowledge and education of the targeted population being trained.  USAID provides the best example of targeting developmental support to the knowledge base of the population in that USAID incorporates an initial assessment of the level of knowledge of the local population and the results of the assessment into account when crafting engagement strategies.[74]  The bottom line in respect to local factors is that efforts must meet the needs of the locals.[75]  Moreover, efforts must meet the perception of need by local populations.  When faced with the wonders of modern medicine, it must not be surprising to healthcare providers that a local population may look on with suspicion and reluctance.  For instance, US military healthcare providers faced traditions of Chinese traditional medicine, folk remedies, and local healers in Vietnam competing to provide support in lieu of any concept of modern medicine.[76]

---

[73] Thomas S. Szayna and Adam Grissom and Jefferson P. Marquis and Thomas-Durell Young and Brian Rosen and Yuna Huh, *US Army Security Cooperation: Toward Improved Planning and Management*, (Santa Monica, CA: Rand Corporation, 2004) xiv.

[74] Shannon Darcy, USAID Bureau of Global Health, interview by author, telephonic, October 2, 2007.

[75] US Government Accountability Office, *DoD Changes Needed to the Humanitarian and Civic Assistance Program*, Washington, DC, 1993, 8.

[76] Wilensky, *Military Medicine to Win Hearts and Minds*, 27.

## Training Benefits

US military forces conducting medical HCA activities are expected to receive some form of benefit in increased skills due to the training they receive while conducting the activities as per regulatory stipulations. Yet, is this training value readily apparent? As LTC Jeff Drifmeyer states in *Military Training and Humanitarian and Civic Assistance* training is often not quantified or readily apparent. For example, that medical care was simply given in an austere environment is often touted as the "training benefit" of medical engagements, yet does this really have any concrete value? HCA regulatory authority states that personnel must receive training on operational readiness skills.[77] It is less than clear how conducting care in an austere environment, in of itself, can increase readiness skills.

## Integration and Coordination

A lack of integration is often a critique as well. It is essential that efforts in improving a states medical capacity are integrated across the entirety of the US government. Essential as it may be, more often than not, medical engagement activities are conducted in a vacuum. Adding to the complexity is the fact that, to achieve true efficacy, integration must occur at all levels of agencies and entities involved: GCCs. service component commands (SCCs), US Department of State country teams, USAID Bureaus, NGOs, State National Guard organizations, and, most importantly, local national governmental agencies, entities, and populations. The use of the term "put a local face" on the event is often spouted as the end all be all of the veneer of legitimacy

---

[77] Jeff Drifmeyer, "Military Training and Humanitarian and Civic Assistance," *Military Medicine* 169, no. 1 (2004) 24.

that is trying to be achieved and the extent of coordination that occurs prior to *HCA medical engagements* or MEDCAP events themselves.

## Effectiveness versus Performance

Measures of effectiveness are those ways of assessing what specific effect is being achieved by actions.[78]  Too often, measures of effectiveness for medical engagements are described more in terms of measures of performance, or measuring how well the action is being performed itself as opposed to how well the desired effect is being realized.  For example, the total number of patient encounters a medical team sees during a medical engagement event is often summarized at the end of the mission as: "the team conducted 1,000 patient encounters in a 2 day medical engagement."  But does this really describe how effective the medical engagement truly was?  Not at all.  It is more a measure of performance than effectiveness in that the statistic that is provided captures "how many" versus "how well" and is similar in logic to futility of the enemy body count statistic of US military operations in Vietnam.  Thus, the measure of effectiveness is often mistaken for a measure of performance.  Measuring the number of patient visits may make for great public affairs fodder, but says nothing about the true measure of effectiveness that is being achieved, if any at all.  This relates to the short-term nature of the typical medical engagement and the futility of being able to capture measures of effectiveness with one-time engagement activities.

---

[78] JP 1-02, 333.

## Learning from Doing

Another quite common critique is the lack of any comprehensive method or manner of learning from the conduct of these types of operations and, subsequently, the lack of institutional learning for best practices in both planning and execution of medical engagements. There is, essentially, no real consolidation of after action reports (AAR) and single source for learning from past medical events.[79] AARs are often incomplete and not beneficial as to what was realized during the event and are more a series of great statistics touting the number of patients encountered.[80] As a result, there is no real cross-fertilization of lessons learned between service components or between US governmental agencies and each engagement is conducted in a vacuum.

## Cost versus Benefit

In the final analysis, and irrespective of how callous it may sound, a primary critique is one rooted in the fiscal arena: What return is the US military receiving on its investment when it sends medical teams off to "do good" or US military medical personnel to "engage?" Unfortunately, this area of concern is not easily analyzed due to the lack of true measures of effectiveness or any real consolidation of statistical information. The cost of a medical event is relatively easy to measure, yet how do you put a dollar figure on benefits of favorable perceptions towards the US and support of US national objectives? Supporting national strategic objectives

---

[79] Driffmeyer, "Military Training and Humanitarian and Civic Assistance," 23.

[80] For an overview of available US Army Medical Department After Action Reports for medical engagement activities, see the AMEDD Lessons Learned website, under "AMEDD Lessons Learned," at http://lessonslearned.amedd.army.mil/index.htm.

is the product being produced, but how does the medical event translate into measuring the success and benefit received?

## Summary of the Current Critique

In the Preface to *Military Medicine to Win Hearts and Minds—Aid to Civilians in the Vietnam* War, Dr. Robert J. Wilensky, who served as a US Army doctor in Vietnam, states: "Even then, I questioned the quality of medical care we were providing… The lack of diagnostic tools, such as laboratories or x-rays; the absent or irregular patient follow-up; the poor referral system for more advanced care or procedures; and the often-inadequate interpreters were all disturbing."[81]  This critique, though written about US Army medical operations in Vietnam decades ago, could still adequately summarize the critique of current operations.  Now that we understand what is being done and how well it is being done by surveying the literature in respect to a critique of how medical engagements are conducted, we must look at how the US military can better employ medical resources in the future.

# Recommendations and Conclusion

## Recommendations

The dizzying array of acronyms and definitions, regulations that say this and that, combined with experiential knowledge of "how it's done" provides an inertia that leads medical operations down the continual path towards ineffective medical engagement.  This should change. With the proper attention and guidance, US military medical formations can change in respect to how medical resources are best employed to accomplish specified foreign policy goals.  As such,

---

[81] Wilensky, *Military Medicine to Win Hearts and Minds*, xiii.

the US military, and particularly the US Army, should see a more expansive concept of medical engagement that transcends the continued reliance on provision of acute care as the primary means of medical engagement for *HCA medical engagements* and simple military-to-military contacts for *TSC medical engagements*.  In doing so, US military medical departments can accept something less than perfection relative to the process of engagement and develop effective strategies that provide foreign governments with departure points for capacity development that are both acceptable and sustainable from the local perspective.

"The only way to cope with the developing world's overwhelming problems is to build effective public health systems.  Such services monitor the health and well-being of its citizens, identify problems in the environment and among the members of its community, and establish public health practices to address these problems, including the problem of whether proper health care is accessible to all, rich or poor."[82]  A bit ambitious for US military medical efforts quite possibly, however, combined with the threat of infectious disease, a good theoretical departure point for TSC and HCA medical engagement efforts.  Security cooperation, by its definition is to enable partner nations to develop the capacity to defeat threats.  As infectious disease is a threat, it logically follows that security cooperation efforts could encompass building states capacities to deal with emergent public health hazards.  In doing so, the US gains a potential for a great deal of benefit in both short and long-term.

## Improving Medical Capacity of Fragile States

The recommendation throughout this paper is that allocation of medical resources should be in pursuit of capacity development for *medically vulnerable* (and strategically important)

---

[82] Garrett, *Betrayal of Trust*, xi.

*states*.  As the level of strategic importance is dictated by guidance provided by the President, the

Secretary of Defense, and as expressed by Geographical Combatant Commands, attention should

be paid to the range of options that medical resources can best be employed with in support of

national objectives.  By focusing on capacity development, in respect to fragile states provision of

basic health services, US military medical resources can be of benefit for a multitude of reasons:

(1) enable fragile states to provide for their citizens, (2) prevent or mitigate potential infectious

disease outbreaks that could affect the US, and (3) to foster better relationships for the long-term

that surpass those resident within the medical community.  For example, the establishment of a

system of minimally trained rural healthcare workers could typify just such a form of capacity

development.  In this example, an individual is provided some level of training and education that

prepares them for provision of medical care within a specified set of limitations that is designed

on the forms of illnesses and injuries expected within a particular area.  This minimally trained

worker could provide a basic level of health service, but more importantly, could provide a means

of awareness for referral of individuals for a higher level of care while concurrently providing a

rudimentary surveillance sensor to "sound the alarm" when infectious disease outbreaks are

suspected.

## Long-Term Strategies for Medical Engagement

Strategies for medical engagement should be designed for the long-term interests of both

the US as well as the targeted state.  In doing so, there is potential for a greater benefit to be

realized.  A long-term strategy directly correlates to an increase in learning in that the longer a

strategy, the more learning can occur. The National Guard State Partnership Program (SPP)[83] is a prime example of the concept of long-term partnership that develops habitual relationships which, in turn, foster much good will among all parties involved. Medical Deployment Support Command's (MDSC) which are geographically aligned could be leveraged in like fashion as the SPP in order to foster long-term, habitual relationships with fragile states of strategic interest within specified areas of responsibilities. By linking TSC and HCA activities in a comprehensive strategy, medical engagement activities can be better realized within the limitations of both programs.

## Information Dissemination: Best Practices

Learning is of paramount importance in respect to medical engagement activities. Learning begins with understanding the specific nature of the environment and situation encountered and continues throughout the engagement process. The requirement for discourse exists across all levels and encompasses all entities involved. As such, a consolidated information venue should be established for medical engagement activities.

## A Need for an Integrated Strategy

When utilizing security cooperation, HCA, and other tools to develop medical capacity the need for an integrated, whole-of-government strategy is critical. This transcends the need for a coordinated strategy in that coordination and integration are not in of the same. The need is to combine interagency efforts in pursuit of common objectives by harnessing resources in order to mitigate the incapacity of varying US government agencies and entities. Then, in a perfect world,

---

[83] For an overview of the SPP, see Appendix 1: Medical Engagement Structural Analysis: From

the US government could coordinate efforts with allies, if possible, in pursuit of medical capacity development. The starting point is to integrate efforts through the SCCs of the GCCs as without integration of efforts among the service components of the Geographical Combatant Commands, there will never be a departure point for true and complete interagency integration.[84] Subsequently, the GCCs can effectively integrate efforts with extra-Department of Defense agencies and entities such as USAID. In working by, with, and through USAID, the US military could take an indirect approach in dealing with NGOs as well.[85]

The integrated strategy should encompass all aspects of the medical engagement process from design, planning, training, and execution. Interactions during peacetime engagement can lead to better understanding during conflict, post-conflict, or stability operations and allow for a more efficient approach. Training should encompass US military medical formations and personnel, USAID personnel, and NGOs as appropriate and be designed to develop habitual relationships between all relevant parties. The US government spends millions of dollars a year to develop habitual relationships with foreign states through the HCA and TSC programs yet there is no organized and comprehensive effort to develop true habitual relationships within the departments, agencies, and entities of the government itself in executing medical engagements.

---

Policy to Boots on the Ground to this paper.

[84] This assumes that within the SCCs there is an integrated strategy. For example, US Army Civil Affairs Public Health and Welfare tasks supported by AMEDD medical formations and personnel in an integrated manner within the ASCC HQs and subordinate units. The intent is not to circumvent or replace extra-medical missions by refocusing allocation of medical resources, only to create a cohesive and integrated strategy.

[85] See Albert Zaccor, "Security Cooperation and Non-State Threats: A Call For an Integrated Strategy," (Washington, DC: The Atlantic Council of the US, 2005).

USAID:  Partner in Waiting

Coordination between USAID and the US Military, specifically for medical pursuits, should occur as a matter of routine and not exception.  This relationship is potentially beneficial for all parties as it is a natural partnership.  Unfortunately, this partnership rises to the forefront of operations during times of conflict, such as occurred during Vietnam and is occurring in Afghanistan and Iraq, but then often recedes during "peacetime" operations and engagement.  The incapacity of USAID, relative to the US Department of Defense, is a daunting challenge but is not insurmountable.  The US military has resourced liaisons from each of the GCCs to work within USAID OMA,[86] but this may not be sufficient for the level of integration that this author recommends for medical endeavors.  As such, GCC surgeon staff medical planners should complement the standing liaison framework by conducting outreach through the standing liaisons to such entities as USAID Bureau of Global Health.  The intent is to facilitate the integration of GCC and Army Service Component Command's (ASCC) medical engagement efforts during peacetime and pre-conflict operations while concurrently establishing a mechanism for learning between USAID and the medical departments of the US military.

## The Role of Medical Resources: A Philosophical Debate

Are US military medical formations solely resourced to provide health services support of eligible beneficiaries, such as uniformed US armed forces members?  This question often takes on a philosophical dimension, albeit one rooted firmly in the interpretation of regulatory and doctrinal language when answering the question of what more can US military medical resources do in the current environment.  Army Regulation 40-1 *Composition, Mission, and Functions of*

*the Army Medical Department* describes the mission of the AMEDD as to: "(1) Maintain the health of members of the Army, (2) Conserve the Army's fighting strength, (3) Prepare for health support to members of the Army in time of war, international conflict, or natural disaster, and (4) Provide for health care for eligible personnel in peacetime, concurrently with (3)."[87]  It is not the author's contention that the AMEDD, or any service's medical department, subordinate medical engagement activities to the primary mission of provision of health services to eligible beneficiaries, only to recognize that the reality of security requirements and need for innovation may necessitate an expansion of a parochial role of medical services.

## A Final Word

In the preface to *Military Medicine to Win Hearts and Minds Aid to Civilians in the Vietnam War*, Dr. Robert J. Wilensky states "My hope is to contribute to an understanding of the use of medical services as an instrument of policy."[88]  This could very well summarize the hope of this author as well.  The purpose of this paper was to fully explore medical operations in support of local populations and argue that the medical formations of the varying branches of the US military comprise resources that can better be leveraged in support of US foreign policy objectives.  The recommendation to enable fragile states to provide health services for their populations by means of capacity development is one that, admittedly, assumes a bit of risk for the short-term and requires both strategic and operational patience.  However, expected results gained from long-term medical strategies that truly benefit populations are potentially immense in

---

[86] Leslie Curtin, USAID Office of Military Affairs, OMA Briefing, December 6, 2007, slide 6.

[87] US Department of the Army, *AR 40-1 Composition, Missions, and Functions of the Army Medical Department,* (Washington, DC, 1983) 4.

[88] Wilensky, *Military Medicine to Win Hearts and Minds*, xiv.

respect to achievement of US foreign policy goals. As secondary purpose, this paper proposes a model for the development of medical strategies that could be utilized as a departure point for those engaged in the design and planning of engagement strategies.

The term *medical diplomacy*[89] adequately encompasses what effective medical engagement strategies can do for the US and what direction the US military medical formations should embark upon. Medical diplomacy is a concept that will only become more important in the future as the US seeks to leverage the totality of national resources in support of national objectives. As such, it is appropriate that the role of medical formations be continually explored in order to determine what more can US military medical resources accomplish in support of US national objectives. However, the primary mission of US military medical resources is to care for and treat uniformed service-members and eligible beneficiaries taken ill or injured while in the performance of their duties. This fact is inviolable and undisputed, yet there is a balance that can, and should, be reached. As such, US military medical institutions should see provision of medical services in support of local populations and the conduct of medical diplomacy as an opportunity and not a threat.

---

[89] Vincent Holman, unpublished paper, "Medical Diplomacy Exporting and Integrating Military Medical Operations with Foreign and Health Policy."

## Appendix 1: Medical Engagement Structural Analysis: From Policy to Boots on the Ground

**Requirements and Limitations: Regulatory, Fiscal and Otherwise**

Title 10, Section 3062 outlines the purposes of the military forces of the United States in that, essentially, the US maintains armed forces to support national policies and implement national objectives.[90] This legislation provides a very broad and ambiguous authority for the US military to exist in the first place and conduct operations "to support national policies." This ambiguity provides a certain level of freedom of action whereby US armed forces can be employed in a variety of roles and missions as long as the mission supports national policies and objectives. This is the authority for the conduct of MEDCAPs in that if a US military unit is conducting an operation, which by definition is supporting US national objectives, it logically follows that the medical portion of that unit could be utilized in a variety of ways in support of the mission of the parent unit, thereby supporting US national objectives.

When looking at the authority for Humanitarian and Civic Assistance (HCA) engagements, Titles 22 and Section 401 of Title 10 to the United States Code are the primary authorities for provision of HCA. Section 401 provides a less than ambiguous limitation on the provision of HCA to those activities that will promote the security interests of the US primarily and the nation being supported only secondarily. Concurrently, the event should lead to an increase in the skills of the US personnel participating with the only other limitation being that this aid will not be provided to any military or paramilitary forces.[91] Humanitarian Assistance is

---

[90] US Department of the Army, *Field Manual 3-07 Stability Operations and Support Operations*, (Washington, DC, 2003) 1-13.

[91] US Code, Title 10, Section 401.

expressly defined in the section as "medical, surgical, dental, and veterinary care provided in areas of a country that are rural or are underserved by medical, surgical, dental, and veterinary professionals, respectively, including education, training, and technical assistance related to the care provided."[92]

## US Department of Defense and the Joint Chiefs of Staff

From a US Department of Defense (DoD) perspective, DoD Directive 2205.2, *Humanitarian and Civic Assistance (HCA) Provided in Conjunction with Military Operations*, establishes DoD policy for the conduct of HCA activities that implements Section 401 Title 10 US Code for US military forces. DoD Directive 2205.2 assigns the Under Secretary of Defense for Policy as having overall responsibility for the development and implementation of HA policy with the Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict serves as the program manager for HCA programs. The Assistant Secretary of Defense for Health Affairs reviews proposed HCA activities to ensure those involving medical personnel will benefit the skills of the medical personnel.[93] The Chairman of the Joint Chiefs of Staff (JCS) has responsibility for reviewing and forwarding annual HCA plans as proposed by the unified Combatant Commands for approval. DoD Instruction 2205.3, *Implementing Procedures for the Humanitarian and Civic Assistance (HCA) Program*, outlines the procedures to implement the requirements as specified in DOD directive 2205.2.

When looking at the conduct of medical engagements under auspices of TSC, the DoD staff develops yearly Security Cooperation Guidance (SCG) which serves as the primary

---

[92] Ibid., Section 401.

document providing TSC guidance to the GCCs. The Defense Security and Cooperation Agency (DSCA) is the focal point for DoD security cooperation and assistance efforts. Within the DSCA is the Office of Humanitarian Assistance and Demining (OHAD) which executes Foreign Humanitarian Assistance from the DoD perspective. The HA/MA program is intended for "alleviating economic or infrastructure deficiencies or other endemic conditions such as disease, hunger, pain, or privation that threaten human life, damage to or loss of property, or social or political stability in third-world nations."[94] The Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) appropriation funds DOD efforts,[95] while the separate military departments fund GCC HCA programs.[96] Specifically, the US Army funds USEUCOM and US Southern Command (SOUTHCOM) activities, the US Navy funds US Pacific Command (PACOM) activities, and the US Air Force funds US Central Command (CENTCOM) activities. These funds are distributed to the Geographical Combatant Command (GCC) for execution of TSC activities.

## Geographical Combatant Commands

GCCs receive direction in the form of Defense Planning Guidance (DPG) that outlines what planning the GCC must accomplish as directed by the DoD. The planning guidance

---

[93] US Department of Defense, *DoDD 22502.2 Humanitarian and Civic Assistance (HCA) Provided in Conjunction with Military Operations* (Washington, DC, 1994), 4.

[94] US Department of Defense, *DoD 5105.38-M Security Assistance Management Manual* (Washington, DC, 2003), 557.

[95] Tome H. Walters Jr., "The Office of Humanitarian Assistance and Demining: Supporting Humanitarian Needs Around the Globe," The DISAM Journal of International Security Studies (Winter 2000/2001), 1.

[96] DoD, *5105.38-M Security Assistance Management Manual*, 557.

encompasses contingency planning and security cooperation planning among other specific directives.

For contingency planning, the GCC prepares plans to address a potential array of requirements arising from events potentially requiring a US response.  As part of contingency planning, the GCC establishes plans for addressing disasters occurring in their respective area of responsibilities (AOR).  For disasters, the GCC is prepared to provide FHA in order to respond to disasters occurring in nations within their AORs in support of USAID, the LFA.

DoD Directive 2205.2 assigns the Geographic Combatant Commanders the responsibility to develop proposed execution plans for HCA activities and execute those activities which are approved by DoD.  The GCC staff coordinates with country teams resident within their AOR and ensures Ambassadorial approval for all proposed activities.  Specifically for security planning, the GCC translates DoD guidance into a TSC strategy that outlines specific strategic objectives and subsequent prioritization of the objectives of the GCC.

Typically, the GCC Surgeon's office integrates with the GCC staff proponents for HCA, TSC, and contingency planning in order to incorporate planning of medical operations in support of GCC objectives.  The Surgeon's Medical Planner develops the medical concept of support for each of the GCC contingency plans and devises the medical portion of the HCA and TSC strategy.  Medically-related TSC events are prioritized and synchronized[97] with the TSC strategy and resourced accordingly.  Once approved, the GCC issues the TSC strategy to the service components for execution.  Additionally, the GCC staff conducts activities such as military-to-

---

[97] US European Command Office of the Command Surgeon, Medical Theater Security Cooperation Strategy (Stuttgart, Germany, 2007) 3.

military contacts as part of the TSC strategy, however, Service Component Commands (SCC) are the primary executors of the GCC strategy.

## Military Departments and Service Component Commands

Service Component Commands execute the GCC TSC Strategy by providing/ coordinating for units and/or personnel in order to conduct engagements as well as providing organic subject matter expertise that may be resident in the component command's staff. The Service Component Surgeon's Office typically integrates with the Service Component HQs TSC proponent and plans and executes the medical portion of the TSC Strategy on behalf of the GCC. Essentially, component commands identify resources required and attempt to source those resources and then execute the events. Resources are provided by service component or other funding sources dependant upon the type of event. As a result, the SCCs are the critical linkage of the strategic/ operational to operational/ tactical and may provide the best insight into the benefits gained. Concurrently, the services have additional responsibilities for security cooperation such as Department of the Army (DA) specific requirements which may be separate from GCC requirements. As such, for this example, an Army Service Component Command (ASCC) may be responsible to two differing HQs for TSC activities: the GCC and the Department of the Army.

## National Guard Bureau

US state National Guard units participating in State Partnership Program (SPP) activities engage with partnered nations in security cooperation activities in order to establish habitual

relationships and thereby foster an environment beneficial to both parties.[98]  The SPP transcends

any single GCC effort in that the state is partnered with a specific nation in an enduring manner

and may have differing goals than those expressed by the GCC.  One of the benefits to the SPP is

the enduring nature of the relationships developed which provides a basis for a long-term

engagement between the respective parties.[99]  The SPP may also provide separate funding

sources for activities in that the state may provide resources in addition to those provided by the

federal government for execution of activities.  Separate from the SPP, National Guard medical

units often conduct HCA or TSC activities as directed by GCCs or SCCs typically as part of their

yearly training requirement.[100]

## DoD Centers for Excellence

The DoD Center for Excellence in Disaster Management and Humanitarian Assistance,

established in 1994, is located at Tripler Army Medical Center in Honolulu, Hawaii.  The center's

mission is to "promote effective civil-military management in international humanitarian

assistance, disaster response and peacekeeping through education, training, research and

information programs."[101]

---

[98] US National Guard Bureau International Affairs Division, National Guard Security Cooperation and State Partnership Program (Washington, DC, 2006) slide 7.

[99] Ibid., slide 11.

[100] For instance, a US Army National Guard medical company may deploy for their two week annual training requirement to provide a MEDRETE in Latin America as coordinated with SOUTHCOM and US Army South (USARSO).

[101] Center for Excellence for Disaster Management and Humanitarian Assistance, under "COE Mission," http://www.coe-dmha.org/ (accessed February 2, 2008).

## Other US Government Agencies?

The Center for Disaster and Humanitarian Assistance Medicine, Uniformed Services University of the Health Sciences is located in Bethesda Maryland.  The mission of the center is to advance the understanding and delivery of disaster medical care and humanitarian assistance worldwide."[102]  As such, the center maintains a clinical focus for provision of medical support in disasters and humanitarian emergencies.

## US State Department

The US State Department is inherently involved in the development and execution of military operations in either indirect or direct manners.  US diplomatic representation within foreign nations is comprised of a country team which is headed by the chief of the United States diplomatic mission, which is typically the US Ambassador.  As head of the diplomatic mission to a foreign government, the US Ambassador has ultimate authority to regulate US governmental operations and actions within the respective nation.  The Defense Attaché Office (DAO) is the US military representative to the Ambassador and is the point of integration between US military operations and the diplomatic mission.  Within the country team there may also be a Security Assistance Organization (SAO) with a Security Assistance Officer (SAO) which maintains a liaison with the host-nation military specifically for security assistance.[103]

---

[102] Center for Disaster and Humanitarian Assistance Medicine, Uniformed Services University of the Health Sciences, under "CDHAM," http://www.cdham.org/CDHAM/Mission/tabid/61/Default.aspx (accessed February 2, 2008).

[103] US Department of the Army, *Field Manual 3-07*, A-6.

## US Agency for International Development

Established with the Foreign Assistance Act (FAA) of 1961, USAID was created in order to "promote long-term assistance for economic and social development."[104] USAID's mandate supports US strategic policies and objectives by "supporting economic growth, agriculture, and trade; global health; and democracy, conflict prevention, and humanitarian assistance."[105] As such, one of USAID's five core goals is the strengthening of fragile states.[106] USAID is the lead for the US government effort in development assistance provided to foreign, particularly fragile, states and develops a strategic plan outlining how USAID will support US national security objectives as directed by the *US National Security Strategy*. In furthering their goals, USAID develops country plans and strategies that outline USAID efforts in a particular country for years. It is these country plans that provide a ready resource of information for the medical planner. The USAID *Fragile States Strategy* outlines the methods and manner for engaging with fragile states, specifically in reference to developing the capacity to identify the sources and remedy the fragility.

USAID is also the LFA for provision of Foreign Humanitarian Assistance subsequent to disasters occurring within the international community. FHA is coordinated through the Office of Foreign Disaster Assistance (OFDA). OFDA deploys Disaster Assistance Response Teams (DART) to the affected areas in order to conduct assessments and coordinate support. Aside from USAID personnel permanently located within country teams, the USAID Office of Military

---

[104] USAID, *Primer,* 6.

[105] Ibid., 7.

[106] Ibid., 3.

Affairs (OMA) provides liaison with the US military and is the focal point of coordination between USAID and the US military.

## US Peace Corps

Established in 1961, the US Peace Corps works to promote peace and friendship between the US and global partners. Peace Corps volunteers work in a variety of endeavors including business development, environmental awareness, agriculture, and health, among other areas.[107] Within the health sector, volunteers primarily provide public health education and awareness training to local citizens in less privileged areas of the world. As part of health education activities, Peace Corps volunteers provide maternal and child services, nutrition and hygiene education, and education designed to raise awareness of the public to the prevention of infectious disease. The intent of the Peace Corps in respect to health is to "improve healthcare at the grassroots level"[108] with projects targeted at the needs of locals.

## **Any Other Stakeholders?**

The US is not the only government involved in either the development or security cooperation business. For example, foreign government development organizations such as the Canadian International Development Agency (CIDA), the Australian Agency for International Development (AusAID), and the UK Department for International Development (DFID) provide

---

[107] US Peace Corps, under "What We Do," http://www.peacecorps.gov/index.cfm?shell=learn.whatvol (accessed January 30, 2008).

[108] US Peace Corps, under "Public Health," http://www.peacecorps.gov/index.cfm?shell=learn.whatvol.health.pubhealth (accessed January 30, 2008).

development assistance to nations.  Included as well are other nation's militaries providing the same form of security cooperation and military engagement activities with foreign militaries.

## Inter-Governmental Organizations

Aside from the governmental organizations, there are various Inter-Governmental organizations (IGO) which are involved in the provision of medical support of local populations. Organizations such as the World Health Organization (WHO) and the Pan-American Health Organization typically operate within proximity to US military medical forces.

## Non-Governmental Organizations (NGO)

Any discussion of provision of medical support to local populations and assistance to foreign governments can not be complete without inclusion of Non-Governmental Organizations (NGOs).  From the US military planner perspective, NGOs are the unknown and possibly nefarious element due to one of two reasons: (1) an incident in the past that soured the military planner to look negatively on all NGOs, or (2) the existence of a form of "free will" of the NGO itself that could be perceived as a threat to unity of effort from the military perspective.  As the possibility of coordinating US military and NGO efforts depends upon the NGO in question, and typically their perception of the role of the US military, it is ultimately out of the power of the US military to force coordination and/or integration, irrespective of how sensible it may seem to the military planner.  Good, bad, or indifferent, NGOs choose in of themselves what they do and how they do it.[109]

---

[109] For a more thorough overview of US military and NGO relations, see Quarto, Floresita US Military/ NGO Interface: A Vital Link to Successful Humanitarian Intervention, US Army War College Carlisle Barracks:  Pennsylvania March 18, 2005

# Appendix 2:  Toward a Proposed Model for Medical Engagement

## The Departure Point

To fully develop a medical engagement strategy requires as complete an understanding of the dynamics within the state being assessed as is realistically possible.  To be effective, the strategy should begin with identification of the source(s) of fragility in respect to lack of ability or desire to provide basic health services for the population which is causal to the lack of health security of the population.  In order to identify the source(s) of fragility, a conceptual and nodal analysis of health systems must be understood and utilized in order to begin the analysis.  A generic conceptual and nodal systems template is outlined in Appendix 4: Systems Analysis for Public Health Emergencies, to this paper.  Incorporation of the systems analysis is the departure point for the proposed model for medical engagement.  For purposes of this paper, the term *medical engagement strategy* will be utilized as an all encompassing term describing the crafting of a strategy outlining a comprehensive approach utilizing all relevant medical resources in order to meet specified objectives.  The focus of the development of a medical engagement strategy is resident at the strategic-operational level, and, as such, the intent of the proposed model for medical engagement is to provide strategic and operational level medical planners a framework for development of strategies for medical engagement.  We begin with the process of designing the medical engagement strategy as a portion of the theater engagement strategy.

## Design of the Medical Strategy

Design differs in planning in respect to the level of analytical and focused detail that is required in order to complete the design process.  Design is intended to establish a shared and systemic understanding of the problem(s) and requires a more holistic understanding of the problem(s) being encountered than that required of a specifically planning-centric process.  The

outputs of the design process are: (1) an initial framed problem, (2) shared understanding, and (3) establishment of a campaign plan.[110]

To initially frame the medical problem, the intent is to understand that which prohibits the fragile state in question from providing health security for its citizens.  Sources of fragility are often interconnected and, as a result of this, true causal sources of fragility may lie outside of the medical community within the fragile state in question, if any single or set of causal factors can even be identified at all.  The potential level of complexity within the medical community, both structural and interactive,[111] combined with the interactions of the nodes resident within the systems of the environment in question, provide a daunting challenge in order to frame the medical problem correctly.  The framed problem is, essentially, an initial hypothesis which states the medical designer's belief as to the source(s) of fragility.  For instance, the designer may state an initial hypothesis of:  The primary source of fragility within country X is a lack of host nation financing of the Ministry of Health.  This is inherently a different problem being encountered than if the hypothesis were:  The primary source of fragility within Country X is a lack of public health education in rural areas, and requires a completely different approach and application of medical resources.  To add to the complexity, the hypothesis may not be as simple as stated above and may incorporate multiple sources of fragility.  The framing of the problem is often conducted

---

[110] United States Army Training and Doctrine Command, *TRADOC Pamphlet 525-5-500 Commander's Appreciation and Campaign Design* (Fort Monroe, Virginia, 2007), 13-15.

[111] The author is utilizing the concepts of structural and interactive complexity as outlined in TRADOC Pamphlet 525-5-500, *Commander's Appreciation and Campaign Design*, whereby structural complexity is dependent upon the number and types of nodes within the systems being analyzed and interactive complexity is determined by how those parts interact with each other and to what degree the nodes have freedom of action to interact as they wish.

concurrently with the development of shared understanding of the situations encountered in the specific state.

In gaining shared understanding, the intent is to determine what is known and what is not known, but is both relevant and necessary knowledge, in order to gain as much of a complete appreciation for the environment and systems operating within the state as is feasible. This process begins with an understanding of the cultural norms of the population groups in the supported states,[112] an appreciation for the historical context states healthcare systems operate within, as well as a realistic appraisal of US national interests in the supported states as expressed in guidance provided by any number of documents. That the understanding process involves a large amount of non-medically specific related knowledge gathering and understanding should not deter the medical designer from doing research and engaging with other than medical community members for insight into the supported state. The local conditions that will be faced and the expectations of the local government, interest groups, and populations involved are critical to designing a medical strategy that will be effective for the long-term. State specific health capacities and health challenges, though not completely dissimilar for all states in a region, are not so similar that generic templates can be laid upon a state; thus is the requirement for a design process. Health challenges, such as malnutrition, infectious disease, and lack of sanitation can readily assist in identification of a state's inability to provide for its citizens but provides no real insight into why the state can, or will not, provide for its citizens. Health capacities such as immunization rates, number of hospital beds, and number of people with access to safe drinking water, etc. can serve as measurable benchmarks for determining a states capacity in the short-term

---

[112] John D. Montgomery and Dennis A. Rondinelli, eds., *Beyond Reconstruction in Afghanistan: Lessons From Development Experience* (New York, NY: Palgrave, 2004), 189.

and provide insight into the medical problem(s) being encountered, and, concomitantly, a shared understanding of the situation.

The end result of the design process, from a medical perspective, is a medical campaign plan that is country specific, accounts for the ongoing actions by all stakeholders within the state, and supports GCC strategic objectives with specific medical objectives, interim medical states, potential points of influence, and desired/ undesired medical effects.

As the GCC establishes desired objectives and strategic effects, medical effects, both desired and undesired, and objectives are developed that support GCC objectives. The medical objective should encompass remedying the source(s) of fragility with appreciation for the relationships and good will that may be fostered by medical activities which, in turn, support GCC objectives. A medical interim state is an accepted, less than perfect but realistic, goal intended to support positive progress towards the medical objective and end state. Desired effects should be nation specific to the greatest extent possible in order to provide a means for realistic and useful assessment. Development of valid undesired effects may be as important, if not more important, as development of desired effects in order to assist with the learning and refinement processes of the medical campaign plan.

In order to properly complete the medical campaign plan, a mechanism for learning should be established that will allow the medical planner to continue gaining knowledge and insight into the environment in order to make adjustments as necessary once engaged in the planning process.[113] The medical campaign plan will potentially become a logical line of effort

---

[113] CACD calls it reframing in that the continued understanding of the problem may require a changed, or reframed, problem statement and hypothesis.

in the overall GCC theater engagement strategy and provide a comprehensive concept for medical

engagement and allocation of medical resources to be further refined during the planning process.

## Planning to Execute

While design can best be summarized as learning,[114] planning is the translation of

learning into a method for practical application. However, learning does not cease upon

completion of the design process as continued learning and refinement are inextricably linked

throughout the planning and execution of the medical strategy. When transitioning from design

to planning, the medical planner delves into the "analytically independent and functionally

specific work"[115] which is required in order to best allocate medical resources to accomplish the

objectives as determined during the design process. The medical designer either presents the

design outputs to a specific medical planner, or more realistically, becomes the medical

planner[116]and then continues with the planning process. At this point, both the US Army Military

Decision Making Process (MDMP) and Joint Operations Planning Process (JOPP) provide an

adequate framework for planning and, as such, a comprehensive planning process will not be

explored in this paper. What is critical, though, is that the tenets of learning and engagement

must remain at the forefront during the entire process.

Once the planning process has been initiated, there is continued need for learning.

Although the typical learning conducted during either MDMP or JOPP is analytic-centric, a more

holistic and expansive learning must continue throughout the process in order to continue to

---

[114] United States Army Training and Doctrine Command, CACD, 14.

[115] Ibid.

[116] Personnel limitations in Surgeon's Sections disallow separate designers and planners

compare the hypothesis developed against what is known of the situation.    If, during the

planning process, a level of knowledge is gained that proves the initial hypothesis invalid, a new,

or reframed,[117] hypothesis must be determined.  An important factor in the planning process is the

continued engagement of all stakeholders in order to continue the learning process while also

coordinating medical efforts amongst all relevant, or potentially relevant, entities.

The medical planner must remain engaged with all stakeholders during the planning

process in order to determine which agencies and entities are providing what services to the

targeted state.  The integration with host nation agencies and entities is critical to the planning of

the execution of the overall strategy for each specific fragile state.  As the medical planner must

determine resources available or desired in order to execute the medical strategy, the potential for

integrated efforts and resultant unity of effort must be continually sought across all parties.  The

output of the planning process is an acceptable medical course of action for engagement that

accomplishes the objectives as specified with provision for adjustment as necessary.

## Execution

As it is the recommendation that long-term engagement strategies be developed, the

proper execution of the medical engagement strategy can be conceptually divided into two areas:

overall strategy execution and execution of specific events.

For execution of the long-term strategy, the logical framework for the execution of

medical engagements can best be summarized as: Assess, Engage, Assess, Refine, Engage.  This

circular logic is conducted in an overall environment of learning which informs the individual

assessments conducted subsequent to each engagement.  A lead agent for line of effort in the

---

[117] Ibid.

medical campaign design should be assigned from those participating in the line of effort in order to facilitate coordination and integration of efforts.

During execution of specific events, the conceptual model of: Prepare, Deploy, Execute, Redeploy, Report, provides utility in framing the conduct of an actual engagement. Those conducting the engagement should prepare by going through a learning process that is informed by the learning of the medical designer and/or planner.

## Learning: The Art and Science of Refinement

The theme of learning resonates throughout the entire process of medical engagement design, planning, and execution. Ultimately, the intent is not to develop overly routine mechanisms for learning, but one that provides flexibility in the overall learning process and provides for multiple sources for learning. AARs are one example of a learning resource that must be sought out and internalized by medical designer/planners as well as by those actually conducting the engagements. Located in such organizations as the Learning Resources Center, Uniformed Services University of Health Sciences,[118] Center for Army Lessons Learned (CALL), and AMEDD Lessons Learned, AARs are an often overlooked resource. If, during the crafting of the medical design and conduct of planning, proper expectations of capturing lessons learned are reinforced by the organization at all levels, the potential for useful and valid AARs will be increased. The requirement is for constant discourse that encompasses all relevant entities.

So too must seemingly unorthodox means of learning be conducted such as 'internet surfing." Combined with the proper amount of skepticism and verification, knowledge gained

---

[118] Jeff Drifmeyer and Craig Llewellyn, "Overview of Overseas Humanitarian, Disaster, and Civic Aid Programs," *Military Medicine* 168 no. 12, 2003, 975.

during periods of internet surfing can be utilized in order to inform a holistic understanding and complement knowledge gained from other more readily acceptable means of learning, such as the Armed Forces Medical Intelligence Center. There is, obviously, a risk in the validity of information to be gained through the internet, however, a healthy sense of skepticism and appreciation for what constitutes a reliable source of information can mitigate this risk. As learning is primarily based upon development of valid and useful methods of assessment, the creation of measures of effectiveness and performance are critical to the learning process. Without them, there is no real learning in respect to how effective the medical campaign plan truly is and what the campaign plan is accomplishing, for good or bad.

## Methods of Assessment: MOEs and MOPs

The better desired and undesired effects are stated, the better chances valid and quantifiable measures of effectiveness and performance can be developed in order to better assess the effects. In developing useful and valid MOEs and MOPs, the essential question is: What metrics make sense? MOEs must be clearly articulated, well thought out, and, measurable. As stated previously, the penchant for measuring patient encounters during medical engagements as the penultimate MOE makes little inherent sense. One opinion is that the only way to truly measure how effective medical engagements are being is to measure death and disease rates that are affected by the types of engagements.[119] This may not provide the only means of a valid MOE in respect to health capacity, but is illustrative of the clarity required in order to draft useful and valid MOEs. As such, health related indicators are, potentially, a true means of assessment into the achievement of desired effects. To be sure health related indicators may take decades to

---

[119] Lougee, "Can We Build a Better Medical Civic Assistance Program," 72.

improve, yet they may be the only true measurement of the health of a grouping of a population, and thus we have the requirement for patience in adhering to long-term strategies. Additionally, such indicators as life expectancy rates, infant mortality rates, and maternal mortality rates are very credible measures of effectiveness. Life expectancy rates and infant mortality rates also provide a correlation with state capacity; better rates may correlate to a higher probability of state capacity.[120] Immunization rates are a key indicator for measuring government performance in the Millennium Challenge Account[121] and could provide utility for the medical planner as well. USAID also establishes indicators for progress towards program achievement that may be useful to the medical planner. As prevention and control of infectious disease improve capabilities for tuberculosis, malaria, and other emerging infectious diseases,[122] USAID groups indicators in such categories as Improvements in Family and Workforce Health and Prevention and Control of Infectious Diseases of Major Importance.

When developed, MOEs should be state specific to the greatest extent possible. This is so in particular regard to establishment of benchmarks and baselines for measurement of progress or improvement. For instance, an Armed Forces of the Philippines (AFP) program measures weight improvement among identified malnourished children, decrease in number of admissions, and immunization rates of children ages between 0 and 6 as measures of effectiveness.[123]

---

[120] Frederick M. Burkle, "Globalization and Disasters: Issues of Public Health, State Capacity and Political Action," *Journal of International Affairs* (Spring/ Summer 2006), 247.

[121] Weinstein and Porter and Eizenstat, *On the Brink*, 48.

[122] USAID, *Primer*, 19.

[123] General Headquarters Armed Forces of the Philippines Office of the Chief Nurse, Primary Health Care Program in the Armed Forces of the Philippines briefing to the XVII Asia Pacific Military Medical Conference, Manila, Philippines, 2007, slide 11.

## A Cost Benefit Analysis

In the final analysis, the question for the Commander is this: Does the medical engagement strategy make sense from a resources perspective? It is of utmost importance for the medical planner/ designer to be able to clearly articulate the benefits to be realized by the medical engagement strategy developed in support of GCC objectives and effects. A dilemma that may be faced in the design process is in convincing the GCC that the long-term benefit is of such magnitude that the seemingly short-term lack of benefit is acceptable once long-term medical objectives have been determined. An example of this is the success seen in US Pacific Command (USPACOM) with medical engagement providing a stepping stone to an improved relationship between the US, specifically USPACOM, and the People's Republic of Vietnam.[124] This ultimately proves the utility of medical engagement and how benefits from medical engagement activities can be seen to support all aspects of US national objectives.

---

[124] COL Thomas Crabtree, interview by author, telephonic, October 29, 2007.

# Appendix 3:  Systems Analysis for a Public Health Emergency

## Conceptual Systems Analysis:  Public Health Emergency

From a conceptual perspective, a state's healthcare infrastructure in respect to management of public health hazards and emergencies comprises the rapid identification of the hazard or emergency, intervention efforts in order to mitigate the hazard and effective communication and information dissemination during the emergency.  This coupled with an environment of assessment and learning completes the conceptual systems model.  The intent is to conduct a systems analysis in order to determine the source(s) of fragility within the state.

## Policy Development and Execution

In the US[125], state and local health officials are primarily responsible for the collection and analysis of epidemiologic data in order to identify when infectious disease outbreaks occur, while concurrently delivering healthcare services in order to prevent or mitigate infectious disease outbreaks[126] as well as provision of public health services  Policies as outlined in the US 10 essential public health services cover the range of  medical services: public health, curative care, health education and training, EMS and disaster response, etc. from a national perspective while individual states establish their own local polices.  Government expenditures on health and health

---

[125] There is a bit of caution in using the US as a model for the conceptual systems analysis for public health emergencies in that the model may not adequately translate to a medically vulnerable fragile state.  The purpose in providing the model is not to provide a ready made template to design objectives around, but to convey a sense of the level of understanding that is required in order to address sources of fragility in medically vulnerable fragile states during the design of the medical engagement strategy.

[126] Christopher H. Foreman Jr., *Plagues, Products, and Politics: Emergent Health Hazards and National Policymaking, (*Washington, DC: The Brookings Institution, 1994), 15.

related issues is the primary tool to immediately assess a state's priority on health but is not the only statistic providing insight into a state's health capacity.

## Surveillance

Epidemiological surveillance is "the ongoing and systematic collection, analysis, and interpretation of health data in the process of describing and monitoring a health event."[127] The creation and maintenance of an effective surveillance network is critical to the ability of a government to rapidly identify an emerging public health hazard and then posture for proper and timely intervention.

## Intervention

A critical aspect to intervening in public health emergencies is time. Time is critical in that a rapid identification of a public health hazard can mitigate, if not prevent outright, the effects of a public health emergency. The intervention must be rapid and appropriate as it could do more harm than good if the intervention was so rapid that it was inappropriate. The rapid intervention, coupled with a continued attempt to educate and advise the public as a whole,[128] can negate any possibility of public misperception or panic in respect to the emergency. The intervention can range in scope from quarantining those suspected of being affected to provision of vaccines and medical treatment of symptoms, to the basic reassurance of the public.

---

[127] Ibid., 30.

[128] Ibid., 58.

## Information Dissemination

Regardless of the threat posed to a population group with an emergent public health hazard, the public is pre-disposed to think the worst and fear for their lives when faced with an infectious disease scenario. Therefore, the education of the public to the true nature of any threat posed is considered important to the incident management.[129] As important as a timely response, the reassurance of the public is critical in not making a bad situation worse. As in the example of the suspected SARS incident in Hong Kong, the very hint of an infectious disease outbreak could lead to very real consequences for a nation's economy and public perception of the legitimacy of their government. Public affairs outlets may not immediately present themselves as a key component of a public health emergency response, but if overlooked, a uniformed public could be a nasty and surprising entity.

## Assessment and Learning

Assessment and learning really can be divided into two categories: pre- and post-event. Pre-event learning involves research in order to identify threats and ways to mitigate those threats. Exercise of the surveillance and response systems within a state can provide a great deal of information on the states capacity to respond effectively. To be sure, the fact that a state exercises its response systems at any level in of itself can provide insight into the state's desire to prepare for the worst. Taking lessons learned from these exercises as well as post-event assessments, from both within the state as well as sharing of lessons learned between states, can improve the states capacity as well. Now that we have an understanding of the conceptual

---

[129] Ibid., 76.

models involved, we will delve deeper into the nodal analysis in order to determine where best the US military can put energy into a state system.

## Nodal Systems Analysis:  Public Health Emergency

Within the conceptual system are nodes that create the infrastructure necessary to properly respond to public health emergencies.  However, in doing so, attention must be paid to the local model itself and not attempt to determine whether the local model meets or fails to meet US specifications[130].  In other words, the starting point for the analysis is a blank piece of paper and not the US model itself as a template.  Typically in less developed and underdeveloped nations, a series of regional and/or national hospitals provide the backbone of the states medical infrastructure.  Regional hospitals are supplemented by local hospitals which have varying capabilities, which themselves may be supplemented by a series of clinics providing basic primary health services.  Specialized facilities such as cancer treatment centers may be present in a state as well.  The entire infrastructure is supported by a network of general practitioners, specialists, physician's assistants, nurses, medical technicians, and community health workers that provide health care.

### Ministry of Health

Whatever the name may be, a state typically has some form of Ministry of Health that provides some level of policy guidance and responsibility for the provision of health services to the state's population.

---

[130] The same caution as in the conceptual model is inherent in the nodal analysis as well.

## National Hospitals

A national hospital is often the "premier" hospital of the state and is accordingly resourced more fully than any other facility.

## Specialty Clinics

Specialty clinics provide specific services such as cancer treatment, well-woman treatment, etc.

## Regional Hospitals

Under the national hospital is a series of regional hospitals which provide higher level of diagnostic capabilities.

## District Hospitals

District hospitals provide a higher level of clinical care including surgical services and diagnostic services (radiological, laboratory, etc.).[131]

## Rural Health Clinics

Rural health clinics are often quite rudimentary and under-resourced. Rural health clinics serve rural populations in a catchment area of villages and communities by providing basic preventive and curative care. Rural clinics are often staffed by small numbers of healthcare professionals. They often provide rudimentary emergency medical services to the population. As an example of the complexity in conducting a nodal analysis is in the definition of a clinic. For

instance, the definition of a clinic from the USAID perspective differs from that of the standard

US military medical concept of a clinic. The US military definition encompasses a more robust

concept than the USAID definition which utilizes a local context to define the term clinic.[132]

## Private Hospitals and Clinics

Private hospitals and clinics supplement public health facilities and provide services to

those who can afford them.

## NGO Hospitals and Clinics

In most under-developed or less developed nations, NGOs establish some level of

support of local populations that can range from establishment of an actual hospital to provision

of short-term clinics approximating MEDCAP efforts.

---

[131] Adnan A. Hyder and Liza Dawson, "Defining Standard of Care in the Developing World: The intersection of International Research Ethics and Health Systems Analysis," *Developing World Bioethics* 5, no. 2, 2005, 149.

[132] Shannon Darcy, USAID Bureau of Global Health, interview by author, telephonic, October 2, 2007.

# Appendix 4: Listing of Key Acronyms

| | |
|---|---|
| **AusAID** | Australian Agency for International Development |
| **CMOC** | Civil Military Operations Center |
| **CIDA** | Canadian International Development Agency |
| **DAO** | Defense Attaché Office |
| **DFA** | Director of Foreign Assistance |
| **DFID** | Department for International Development |
| **DSCA** | Defense Security Cooperation Agency |
| **EUCOM** | US European Command |
| **FA** | Foreign Assistance |
| **FAA** | Foreign Assistance Act |
| **FAO** | Foreign Area Officer |
| **FHA** | Foreign Humanitarian Assistance |
| **GCC** | Geographical Combatant Command |
| **HA** | Humanitarian Assistance |
| **HAP**- | Humanitarian Assistance Program |
| **HCA**- | Humanitarian and Civic Assistance |
| **HOC** | Humanitarian Operations Center |
| **HSS** | Health Services Support |
| **IGO** | Inter-Governmental Organization |
| **ME** | Medical Engagement |
| **MEDCAP** | Medical Civic Action Program |
| **MFHA** | Medical Foreign Humanitarian Assistance |
| **MILPHAP** | Military Provincial Hospital Augmentation Program |
| **MOE**- | Measure of Effectiveness |
| **MOP** | Measure of Performance |
| **NGO** | Non-Governmental Organization |
| **OFDA** | Office of Foreign Disaster Assistance |
| **OHDACA** | Overseas Humanitarian, Disaster, and Civic Assistance |
| **OMA**- | Office of Military Affairs |
| **PACOM** | US Pacific Command |
| **PEPFAR** | President's Emergency Plan for AIDS Relief |
| **PI** | Pandemic Influenza |
| **PRT** | Provincial Reconstruction Team |
| **SAO** | Security Assistance Organization |
| **SARS** | Severe Acute Respiratory Syndrome |
| **SCC** | Service Component Command |
| **SCG** | Security Cooperation Guidance |
| **SPP** | State Partnership Program |
| **TCA** | Traditional Commander's Activities |
| **TSC** | Theater Security Cooperation |
| **USAID** | US Agency for International Development |
| **WHO** | World Health Organization |

# Appendix 5: Glossary of Key Terms

**Epidemic-** Affecting a large number of the population (Merriam-Webster Dictionary)

**Foreign Assistance- (FA)** Assistance to foreign nations ranging from the sale of military equipment to donations of food and medical supplies to aid survivors of natural and manmade disasters. US assistance takes three forms — development assistance, humanitarian assistance, and security assistance. (JP 1-02)

**Foreign Disaster Relief-** Prompt aid that can be used to alleviate the suffering of foreign disaster victims. Normally it includes humanitarian services and transportation; the provision of food, clothing, medicine, beds, and bedding; temporary shelter and housing; the furnishing of medical materiel and medical and technical personnel; and making repairs to essential services. (JP 1-02)

**Foreign Humanitarian Assistance (FHA)-** Programs conducted to relieve or reduce the results of natural or manmade disasters or other endemic conditions such as human pain, disease, hunger, or privation that might present a serious threat to life or that can result in great damage to or loss of property. Foreign humanitarian assistance (FHA) provided by US forces is limited in scope and duration. The foreign assistance provided is designed to supplement or complement the efforts of the host nation civil authorities or agencies that may have the primary responsibility for providing FHA. FHA operations are those conducted outside the United States, its territories, and possessions. (JP 1-02)

**Health Security-** Provision and maintenance of measures aimed at preserving and protecting the health of the population. (WHO)

**Health Services Support (HSS)-** All services performed, provided, or arranged to promote, improve, conserve, or restore the mental or physical well-being of personnel. These services include, but are not limited to, the management of health services resources, such as manpower, monies, and facilities; preventive and curative health measures; evacuation of the wounded, injured, or sick; selection of the medically fit and disposition of the medically unfit; blood management; medical supply, equipment, and maintenance thereof; combat stress control; and medical, dental, veterinary, laboratory, optometric, nutrition therapy, and medical intelligence services. (JP 1-02)

**Humanitarian and Civic Assistance (HCA)-** Assistance to the local populace provided by predominantly US forces in conjunction with military operations and exercises. This assistance is specifically authorized by title 10, United States Code, section 401, and funded under separate authorities. Assistance provided under these provisions is limited to (1) medical, dental, and veterinary care provided in rural areas of a country; (2) construction of rudimentary surface transportation systems; (3) well drilling and construction of basic sanitation facilities; and (4) rudimentary construction and repair of public facilities. Assistance must fulfill unit training requirements that incidentally create humanitarian benefit to the local populace. (JP 1-02)

**Human Security-** The right and ability of individuals, communities and societies to have the security of a livelihood free from "fear and want" (WHO)

**Measure of Effectiveness (MOE)-** A criterion used to assess changes in system behavior,

capability, or operational environment that is tied to measuring the attainment of an end state, achievement of an objective, or creation of an effect. Also called MOE. See also combat assessment; mission. (JP 1-02)

**Measure of Performance (MOP)-**  A criterion used to assess friendly actions that is tied to measuring task accomplishment. (JP 1-02)

**Medical Civic Action Program (MEDCAP)-**  Provision of medical treatment to local nationals by US military medical personnel during conflict, post-conflict, or stability operations.

**Medical Engagement (ME)-**  Any event that has any number of uniformed US military medical personnel providing medical treatment, education, or advice to an individual or group of local national population during peacetime or the lead up to major combat operations. (Author's Definition)

**Medical Foreign Humanitarian Assistance (MFHA)-**  Provision of medical support to local populations affected by natural or man-made disasters. (Author's Definition)

**Pandemic-**  A disease occurring over a wide geographical area and affecting an extremely large number of the population. (Merriam-Webster Dictionary)

# BIBLIOGRAPHY

## Articles, Papers, and Reports

Beitler, Alan L., Jennifer L. Junilla and James H. Meyer Jr. "Humanitarian Assistance in Afghanistan: A Prospective Evaluation of Clinical Effectiveness," *Military Medicine.* (September 2007): 889- 893.

Burkle, Frederick M. "Globalization and Disasters: Issues of Public Health, State Capacity and Political Action," *Journal of International Affairs.* (Spring/ Summer 2006): 241- 265.

Caudhill, Virginia. "Defense Security Cooperation Agency is a Key Player in Providing Wheelchairs to Afghanistan," *The DISAM Journal of International Security Assistance Management* (Fall 2003): 115- 117.

Ciceraro, Jose A. "Requirements for Humanitarian Assistance in CONUS," *Military Review.* (March/ April 1995).

Drifmeyer, Jeff and Craig Llewellyn. "Military Training and Humanitarian and Civic Assistance," *Military Medicine.* (January 2004): 23-29.

_____. "Overview of Overseas Humanitarian, Disaster, and Civic Aid Programs," *Military Medicine.* (December 2003): 975-980.

_____. "Toward a More Effective Humanitarian Assistance," *Military Medicine.* (March 2004): 161- 168.

Hyder, Adnan A. and Liza Dawson, "Defining Standard of Care in the Developing World: The Intersection of International Research Ethics and Health Systems Analysis," *Developing World Bioethics* 5, no. 2, (2005): 149.

Lane, Christopher and Amanda Glassman. "Bigger and Better? Scaling Up and Innovation in Health Aid," *Health Affairs.* (July/ August 2007): 935- 948.

Licina, Derek J. and Kenneth Schor. "Developing a Monitoring and Evaluating Capability for the U.S. Department of Defense Humanitarian Assistance Program," *Military Medicine.* (April 2007): 339-345.

Loomis, Edward S. and Robert Crowley. "Humanitarian and Civic Assistance Program," *The DISAM Journal of International Security Assistance Management* (Winter 2000/2001).

Lougee, Douglas. "Can We Build a Better Medical Civic Assistance Program? Making the Most of Medical Humanitarian Civic Assistance Funding," *The DISAM Journal of International Security Assistance Management.* (February 2007): 68-73.

_____ and Teresa M. Kemmer, and Julia Lynch. "An Innovative Medical Civil-Military Operation Training Program," *Military Medicine.* (February 2007): 205-209.

Miskel, James F. "Better Tools for Humanitarian Missions," *Orbis.* (Spring 2000).

Stewart, Patrick. "Weak States and Global Threats: Fact or Fiction?," *The Washington Quarterly.* (Spring 2006): 27- 53.

_____, and Kaysie Brown. *Greater Than the Sum of Its Parts? Assessing "Whole of Government" Approaches to Fragile States.* New York, NY: International Peace Academy, 2007. http://www.ipacademy.org/asset/file/175/987-fore.pdf. (accessed 28 September, 2007).

Stoddard, Abby and Adele Harmer.  "Little Room to Maneuver: The Challenges to Humanitarian Action in the New Global Security Environment," *Journal of Human Development.* (March 2006): 23- 41.

Taylor, Shawn F. and Bret T. Ackermann.  "Civil Affairs Augmentation of Special Forces Units Greatly Enhance MEDRETE Impact," *Military Medicine*. (May 2007): 466-470.

Thomas S. Szayna and Adam Grissom and Jefferson P. Marquis and Thomas-Durell Young and Brian Rosen and Yuna Huh.  *US Army Security Cooperation: Toward Improved Planning and Management*, (Santa Monica, CA: Rand Corporation, 2004).

Toole, MJ and RJ Waldman.  "The Public Health Aspects of Complex Emergencies and Refugee Situations," *Annual Review of Public Health.* (1997): 283- 312.

Walters Jr., Tome H.  "The Office of Humanitarian Assistance and Demining:  Supporting Humanitarian Needs Around the Globe," *The DISAM Journal of International Security Assistance Management* (Winter 2000/2001).

Weinstein, Jeremy and John Edward Porter and Stuart E. Eizenstat.  *On the Brink: Weak States and US National Security*, (Washington, DC, The Center for Global Development, Commission for Weak States and US National Security, 2004).

Zaccor, Albert. *Security Cooperation and Non-State Threats: A Call for an Integrated Strategy. Occasional Paper,* (Washington, DC:  Atlantic Council of the United States, August 2005).

## Theses and Research Papers

Dykeman, Gregory J.  *Security Cooperation: A Key to the Challenges of the 21$^{st}$ Century.* (Carlisle Barracks, PA: Strategic Studies Institute, November 2007).

Ebling, Linda L.  *The DOD Humanitarian and Civic Assistance Program Concepts, Trends, and Medical Challenges,* (Maxwell Air Force Base: Air Command and Staff College, 1997).

Jaffin, Jonathan H.  *Medical Support for the American Expeditionary Forces in France During the First World War*, (FT Leavenworth, KS: US Army Command and General Staff College, 1991).

Nickle, C. John.  *The Role of Health Services Support in the Theater Security Cooperation Plan: Do We Have it Right?*, (Newport, RI: Naval War College, 2004).

Quarto, Floresita C. *US Military/ NGO Interface: A Vital Link to Successful Humanitarian Intervention.*  (Carlisle Barracks, PA: US Army War College, March 18, 2005).

## Books

Armfield, Blanche B.  *Medical Department United States Army in World War II: Organization and Administration In World War II.*  Washington, DC: Center for Military History, 1963.  http://history.amedd.army.mil/booksdocs/wwii/orgadmin/frameindex.html (accessed January 31, 2008).

Brower, Jennifer and Peter Chalk.  *The Global Threat of New and Reemerging Infectious Diseases Reconciling US National Security and Public Health Policy.*  Santa Monica, CA: Rand, 2003.

Cahill, Kevin M., ed.  *A Framework for Survival Health, Human Rights, and Humanitarian Assistance in Conflicts and Disasters.* New York, NY: Council on Foreign Relations and BasicBooks, A Division of HarperCollins Publishers, Inc., 1993.

Donini, Antonio and Norah Niland and Karin Wermester, eds.  *Nation-Building Unraveled? Aid, Peace and Justice in Afghanistan.* Bloomfield, CT: Kumarian Press, 2004.

Erickson, Ralph Loren.  *The Historic Role of Military Preventive Medicine and Public Health in US Armies of Occupation and Military Government*,  Washington, DC:  The Borden Institute, Walter Reed Army Medical Center. http://www.bordeninstitute.army.mil/published_volumes/mpmVol1/PM1ch3.pdf (accessed January 9, 2008).

Foreman Jr., Christopher H.  *Plagues, Products, and Politics Emergent Public Health Hazards and National Policymaking*. Washington, DC: The Brookings Institution, 1994.

Garrett, Laurie.  *Betrayal of Trust: The Collapse of Global Public Health*.  New York, NY: Nyperion, 2000.

Gillet, Mary C.  *The Army Medical Department: 1818- 1865*.  Washington, DC: Center for Military History, 1987. http://history.amedd.army.mil/booksdocs/civil/gillett2/frameindex.html (accessed December 12, 2007).

_____.  *The Army Medical Department: 1865- 1917: Public Health in the Philippines*. Washington, DC: Center for Military History, 1995. http://history.amedd.army.mil/booksdocs/spanam/gillet3/frameindex.html (accessed January 31, 2008).

Lindenberg, Marc and Coralie Bryant.  *Going Global Transforming Relief and Development NGOs*. Bloomfield, CT: Kumarian Press, 2001.

Montgomery, John D. and Dennis A. Rondinelli, eds.  *Beyond Reconstruction in Afghanistan Lessons From Development Experience.* New York, NY: Palgrave Macmillan, 2004.

Natsios, Andrew S.  *US Foreign Policy and the Four Horsemen of the Apocalypse Humanitarian Relief in Complex Emergencies.*  Westport, CT: The Center for Strategic and International Studies, 1997.

Neel, Spurgeon.  Medical Support of the U.S. Army In Vietnam 1965-1970.  Washington, DC: Center for Military History, 1991. http://history.amedd.army.mil/booksdocs/vietnam/medicalsupport/frameindex.html (accessed January, 31 2008).

Turabian, Kate L. *A Manual for Writers of Research Papers, Theses, and Dissertations*. 7th ed. Chicago: University of Chicago Press, 2007.

Wilensky, Robert J.  *Military Medicine to Win Hearts and Minds Aid to Civilians in the Vietnam War.*  Lubbock, TX: Texas Tech University Press, 2004.

### US Government Documents, Manuals, and Reports

Bush, George W. *The National Security Strategy of the United States of America.*  Washington, D.C.: The White House, March 16, 2006.

Defense Security Cooperation Agency. *Strategic Plan 2006-2011*. Washington, DC: DSCA, February 13, 2006. http://www.dsca.osd.mil/programs/stratplan/DSCA_StratPlan_2006-2011.pdf. (accessed September 28, 2007).

_____. *Chapter 12: Humanitarian Assistance and Mine Action Programs in Security Assistance Management Manual DoD 5105.38-M*, Washington, DC: DSCA, October 3, 2003. http://www.dsca.mil/samm/Chapter%2012%20-%20HA%20and%20MA%20Programs.pdf. (Accessed September 25, 2007).

_____. Fact Sheet: *DoD Humanitarian Assistance and Mine Action Program*. Washington, DC: DSCA, undated. http://www.dsca.osd.mil/programs/HA/HUMANITARIAN%20AND%20CIVIC%20ASSISTANCE%20(HCA)%20PROGRAM.pdf. (accessed September 28, 2007).

Department of the Army, Office of the Surgeon General. *Regulation 12-1 OTSG Security Assistance Program.* Washington, DC: OTSG, August 22, 1998.

Department of the Army Training and Doctrine Command. *TRADOC Pamphlet 525-5-500 Commander's Appreciation and Campaign Design.* Fort Monroe, Virginia, 2007.

Headquarters, Department of the Army. *AR 11-31 Army International Security Cooperation Policy*, Washington, DC: HQDA, October 24, 2007.

_____. *AR 40-1 Composition, Functions, and Missions of the Army Medical Department*, Washington, DC: HQDA, July 1, 1983.

_____. *Field Manual 3-0 Operations*, Washington, DC,:HQDA, February 28, 2008.

_____. *Field Manual 3-05.40 Civil Affairs Operations*, Washington, DC: HQDA, September 29, 2006.

_____. *Field Manual 3-07 Stability Operations and Support Operations*, Washington, DC: HQDA, February 20, 2003.

_____. *Field Manual 5-0 Army Planning and Orders Production*, Washington, DC: HQDA, January 20, 2005.

_____. Field Manual 8-42 *Combat Health Support in Stability Operations and Support Operations*, Washington, DC: HQDA, October 27, 1997.

Joint Chiefs of Staff. *National Military Strategy of the United States of America.* Washington, DC: The Joint Staff, 2004.

_____. *Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms.* Washington, DC: The Joint Staff, July 12, 2007.

_____. *Joint Publication 3-07.6, Joint Tactics, Techniques, and Procedures for Foreign Humanitarian Assistance.* Washington, DC: The Joint Staff, August 15, 2001.

_____. *Joint Publication 3-57, Joint Doctrine for Civil Affairs.* Washington, DC: The Joint Staff, April 14, 2003.

_____. *Joint Publication 3-57.1, Joint Doctrine for Civil-Military Operations.* Washington, DC: The Joint Staff, February 8, 2001.

_____. *Joint Publication 4-02, Health Service Support.* Washington, DC: The Joint Staff, October 31, 2006.

Rumsfeld, Donald H. *National Defense Strategy of the United States*, Washington, D.C.: Office of the Secretary of Defense, 2005.

US Agency for International Development. *USAID/ Nigeria Annual Report.* Washington, DC: USAID, June 16, 2005. http://pdf.usaid.gov/pdf_docs/PDACD873.pdf. (accessed September 28, 2007).

_____. *USAID Fragile States Strategy.* Washington, DC: USAID, January, 2005. http://www.usaid.gov/policy/2005_fragile_states_strategy.pdf. (accessed September 25, 2007).

_____. *USAID Primer: What We Do and How We Do It.* Washington, DC: USAID, 2006. http://www.usaid.gov/about_usaid/primer.html. (accessed on January 12, 2008).

US Congress. US Code, Title 10, Section 401*: Humanitarian and Civic Assistance provided in Conjunction with Military Operations.* Washington, DC: GPO, 12 July 2005. http://uscode.house.gov/pdf/2005/2005usc10.pdf. (accessed September 28, 2007).

US Department of Defense. *Directive 2205.2: Humanitarian and Civic Assistance (HCA) Provided in Conjunction with Military Operations.* Washington, DC: Office of the Secretary of Defense, October 6, 1994.

_____. *Directive 3000.05: Military Support for Stability, Security, Transition and Reconstruction (SSTR) Operations.* Washington, DC: Office of the Secretary of Defense, November 28, 2005.

_____. *Directive 5100.46: Foreign Disaster Relief.* Washington, DC: Office of the Secretary of Defense, December 4, 1975.

_____. Instruction 2205.3: *Implementing Procedures for the Humanitarian and Civic Assistance (HCA) Program.* Washington, DC: Office of the Secretary of Defense, January 27, 1995.

_____. *DoD 5105.38-M Security Assistance Management Manual.* Washington, DC, DSCA, 2003.

US European Command Office of the Command Surgeon, *Medical Theater Security Cooperation Strategy.* Stuttgart, Germany: EUCOM Surgeon, 2007.

US General Accounting Office, National Security and International Affairs Division. "Department of Defense Changes Needed to the Humanitarian and Civic Assistance Program," *Report to Congressional Requesters.* Washington, DC: GAO, November 1993.

US National Guard Bureau International Affairs Division, National Guard Security Cooperation and State Partnership Program Briefing. Washington, DC,: NGB, 2006.

Westin, Susan S. "Foreign Assistance Observations on Post-Conflict Assistance in Bosnia, Kosovo, and Afghanistan," *Testimony Before the Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform, House of Representatives.* Washington, DC: GAO, July 18, 2003.

### Foreign Government and Intergovernmental Documents, Manuals, and Reports

UK Department for International Development. Why we need to work more effectively in fragile states. London, England: DFID, January 2005. http://www.dfid.gov.uk/pubs/files/fragilestates-paper.pdf. (accessed on 28 September 2007).

World Health Organization, *Issues Paper: Invest in Health, Build a Safer Future.* Geneva Switzerland: WHO, 2007. http://www.who.int/world-health-day/previous/2007/activities/issues_paper/en/index.html (accessed December 12, 2007).